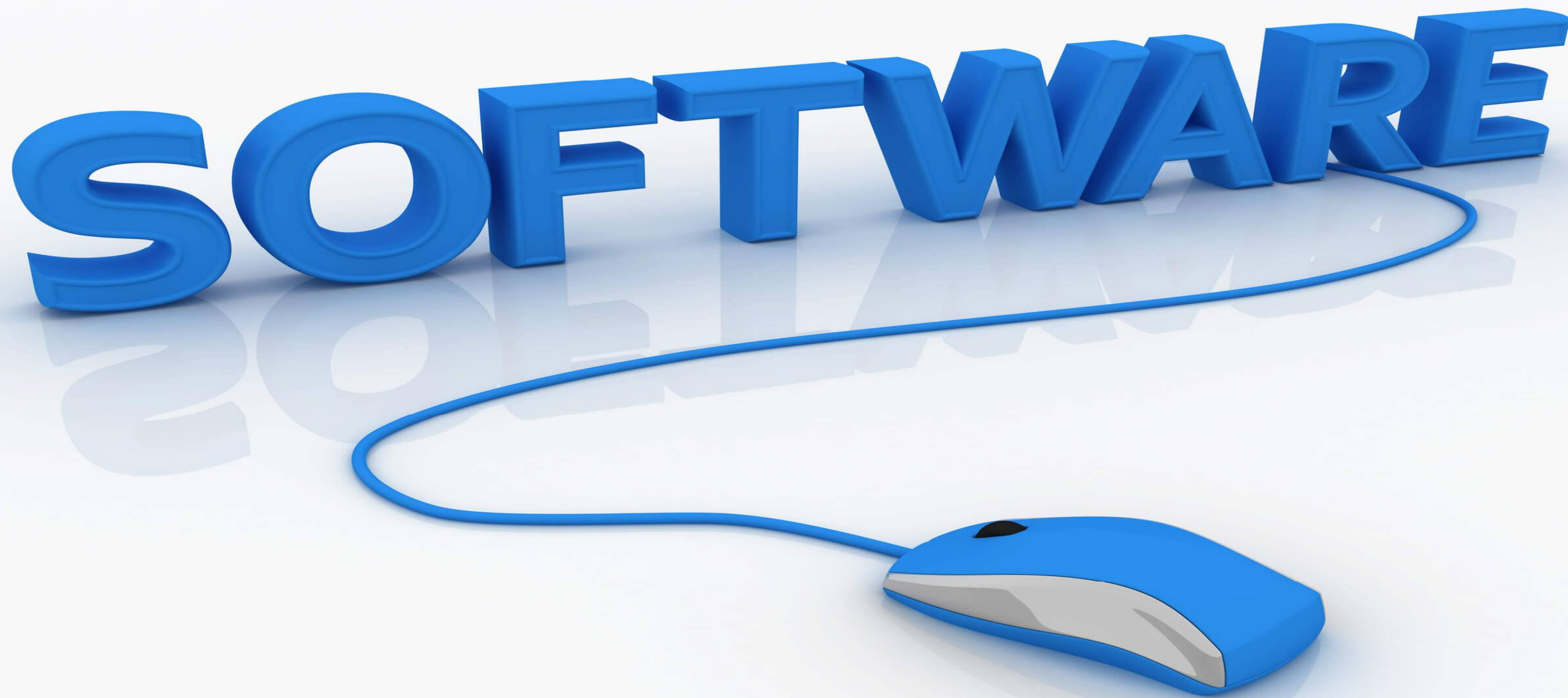
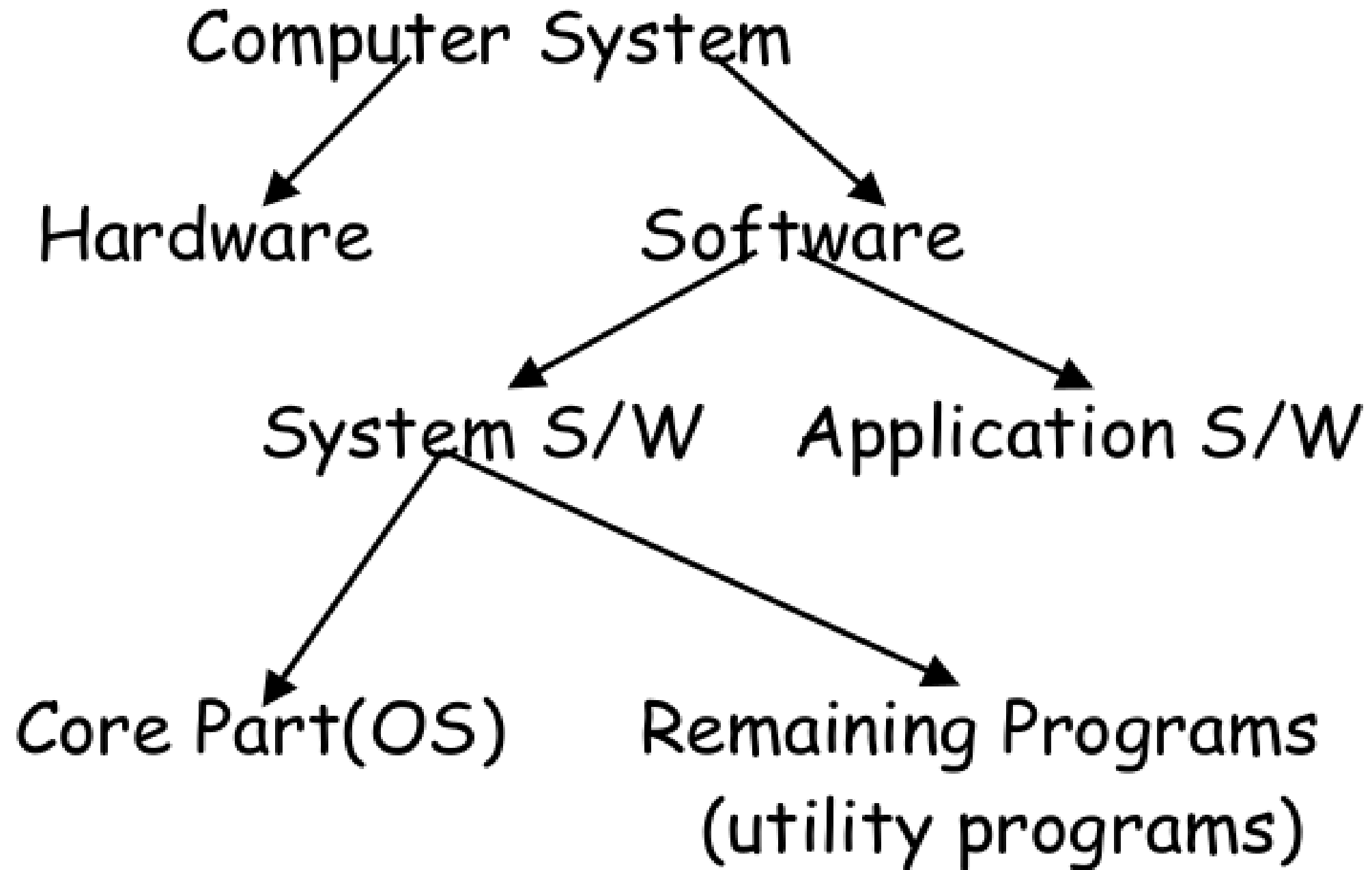


I kTVo;j









Recycle Bin

MuseScore 3

Leesburg, Florida.mp4

Firefox

OBS Studio

Vero Beach, Florida.mp4

Microsoft Security...

Oracle VM VirtualBox

October 6 2022.mp4

ProtonVPN

paint.net

KeyboardSh...

4K YouTube to MP3

Chess

Audacity

Minecraft Launcher

BAND

PFP.png

Discord

Music Playlist

Free Downlo...

Tarpon Springs, FL...

lightworks 2022.2

Percussion Clinic.mp4



The taskbar contains several icons: the Start button (Windows logo), Firefox, Microsoft Security..., ProtonVPN, OBS Studio, File Explorer, Task View, and a custom icon with a purple square and a white circle.

The system tray contains several icons: a location pin, a network status icon, a volume icon, a Bluetooth icon, a power icon, and a clock.

10:13 PM
2/19/2023

Start

Ben
Martens 

Sanjay Jacob

RE: Let's go see a movie this weekend?
Sounds like a good plan to me. I don't ...

Mail

8

Cricket team practice
The Field
4:30 PM - 7:00 PM

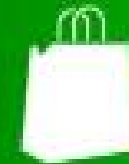


8

Friday



Internet Explorer



Store

Unmanned commercial rocket visits
the International Space Station



Roxanne Kenison also
commented on Lesley
Allen's post.



4



Photos



Maps



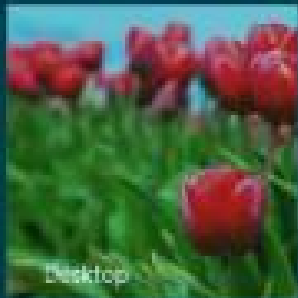
SkyDrive



68°

Sydney, Australia
Sunny 51° / 65°

Weather



Desktop



Messaging



Now playing

Extreme paragliding on the
south coast of Australia



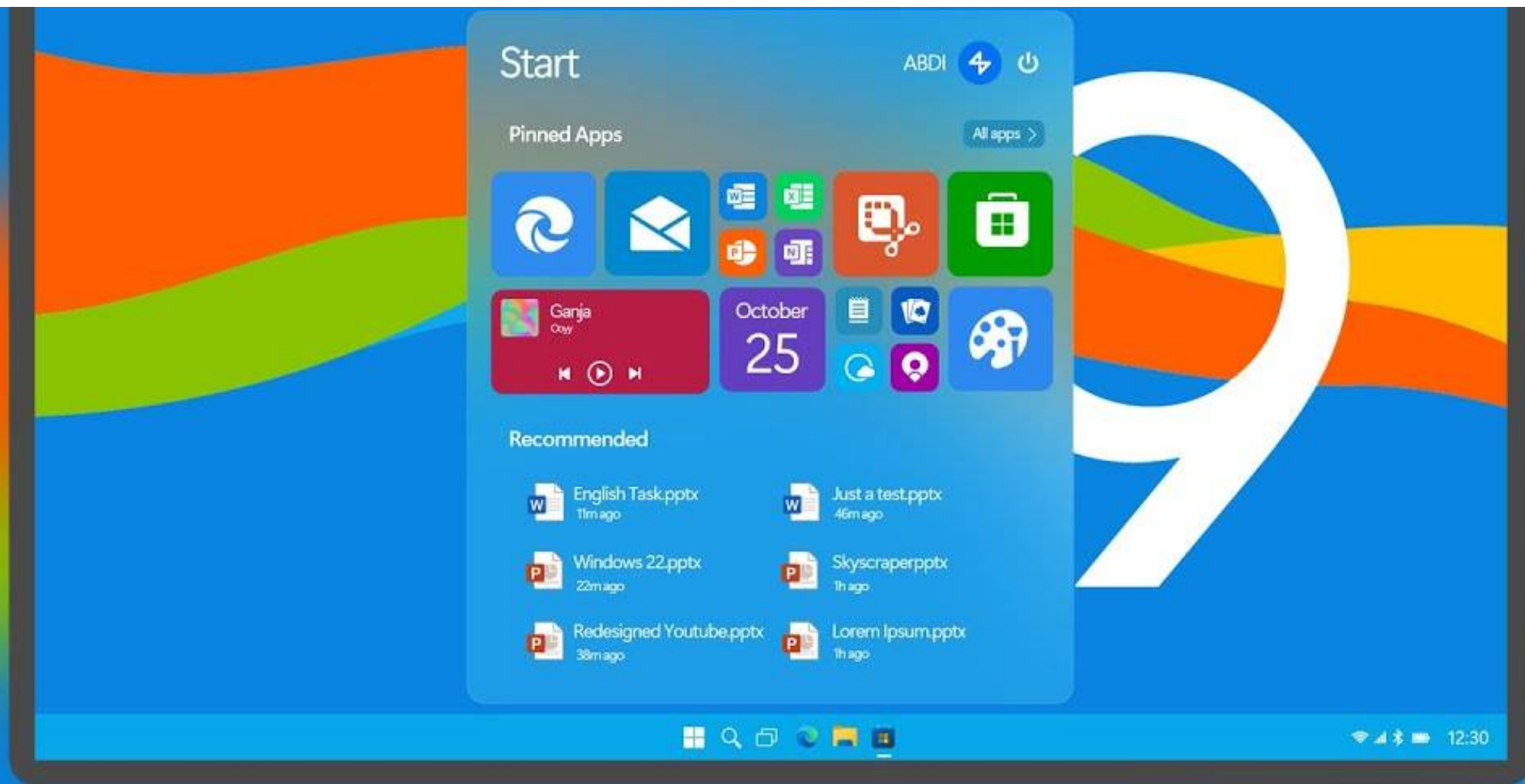
Music



Xbox LIVE Games



Camera



Windows 9

2022 Edition



Recycle Bin



BernardoTech

Life at a glance

Play and explore

Most used



Get Started



Get Skype



Maps



People



Calculator



Alarms & Clock

Recently added



OneDrive



Calendar



Mail



Microsoft Edge



Photos



Cortana



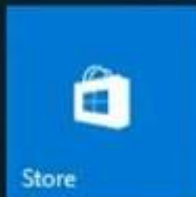
Weather



Phone Compa...



OneNote



Store



News



Microsoft Solitaire Collection



Get Office



File Explorer



Settings



Power



All apps

New



Search the web and Windows



5:01 PM
3/3/2016



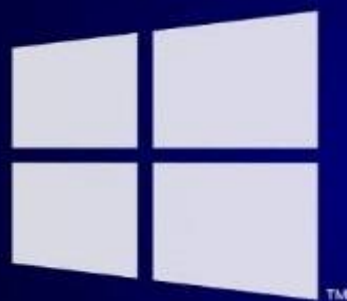
This PC



Network



Recycle Bin



Windows[®] 10

One product family. One platform. One store



Search the web and Windows



10:51 PM
11/6/2015



Recycle Bin



Minecraft
Launcher



OBS Studio



Discord

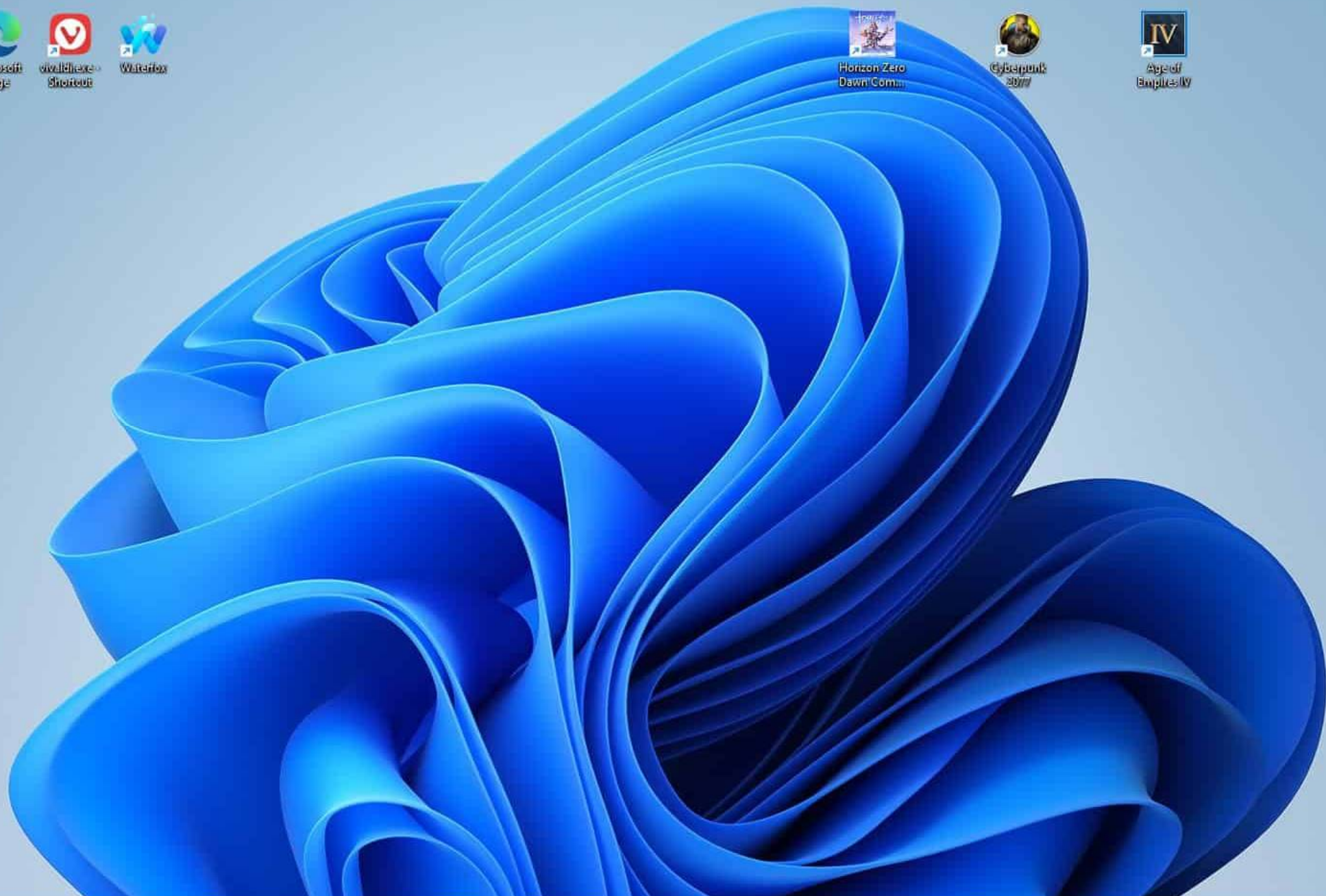


Wondershare
Filmora9



11:37 PM
11/15/2021

5



- **fd l h Hkh dEl;Vj f l LVe dk iR;d Hkkx ;k rk gkMo;j g ;k**
l kTVo;j gA
- **dEl;Vj d Hkkfrd (Physical) cukoV $\frac{1}{4}N$ dj eg l l dju ;kX;**
Hkkx $\frac{1}{2}$ dk gkMo;j dgr gA
- **gkMo;j d vUrxr MkVk buiV d fy, i;Dr dEl;Vj rFkk**
m l l tM l Hkh l k/ku gA
- **fiUVj] dh&ckM vkj ekMe t l h ckgjh fMokb l k dk ifjQjy**
fMokb l dgr gA
- **fd l h Hkh dEl;Vj gkMo;j ;k l kTVo;j }kjk i;kx fd; tku**
oky djDVjk dh ,d l ph fu/kkfjr g] ft l djDVj lV dgr
gA
- **gj djDVj ,d uEcj d }kjk ifrfuf/kRo gkrk gA**

- **ASCII** **djDVj** **I V** **English** **d** **l kj** **djDVjk** **rFkk** **fo'k" k** **dVky**
djDVjk **d** **fy, 0** **l** **127** **uEcjk** **dk** **mi ;kx** **djrk** **gA**
- **l** **k** **Vo ;j** **ikxfex** **Hkk"kk** **}kjk** **fy[k** **x ;** **fun'kk** **dh** **Ük[kyk** **g]**
ft **l** **d** **vu** **lkj** **fn ;** **x ;** **MVk** **dk** **ik** **l** **l** **gkrk** **gA**
- **fcuk** **l** **k** **Vo ;j** **d** **dEl ;Vj** **dkb** **Hkh** **dk ;** **ugh** **dj** **l** **drk** **gA**
- **b** **l** **dk** **ikFkfed** **mí' ;** **MkVk** **dk** **l** **puk** **e** **ifjofrr** **djuk** **gA**
- **l** **k** **Vo ;j** **d** **fun'kk** **d** **vu** **lkj** **gh** **gkMo ;j** **Hkh** **dk ;** **djrk** **gA** **b** **l**
ikxke **Hkh** **dgr** **gA**
- **dEl ;Vj** **ikxkek** **dk** **fy[ku** **oky** **vkj** **mudk** **ijh{k.k** **dju** **oky**
0 ;fDr ;k **dk** **ikxkej** **dgr** **gA**

- gkMo; j vkj l kVo; j d chp l pkj LFkkfir dju dk bVjQ l (Interface) dgr gA
- l Hkh l kVo; j ykb l l d ek/;e l l jf{kr rFkk ifrof/kr jgr gA
- l kVo; j ykb l l l kVo; j d fuekrk rFkk mi; kxdÙkk d chp dkuuh , xheV g] ft l d vUrxr , d l vf/kd dEl;Vj ij l kVo; j dk bLVky djuk] dkM e fd l h rjg dk : iUrj.k vkj l kVo; j e fd l h rjg dk cnyko djuk fu"kk gA ;g l kVo; j d mi; kx dk

deI;Vj I kTVo;j dk I keU;r%
rhu oxk e oxhd'r fd;k tkrk g %

- 1- f l LVe I kTVo;j (System Software)
- 2- vu i ;kx I kTVo;j (Application Software)
- 3- i kxkfex I kTVo;j (Programming software)

USERS

USERS

Application Softwares

Games

Word

Paint

System Software

Excel

Operating
System

Tools
&
Utilities

Firefox

Hardware

Disk,CPU,RAM, etc.

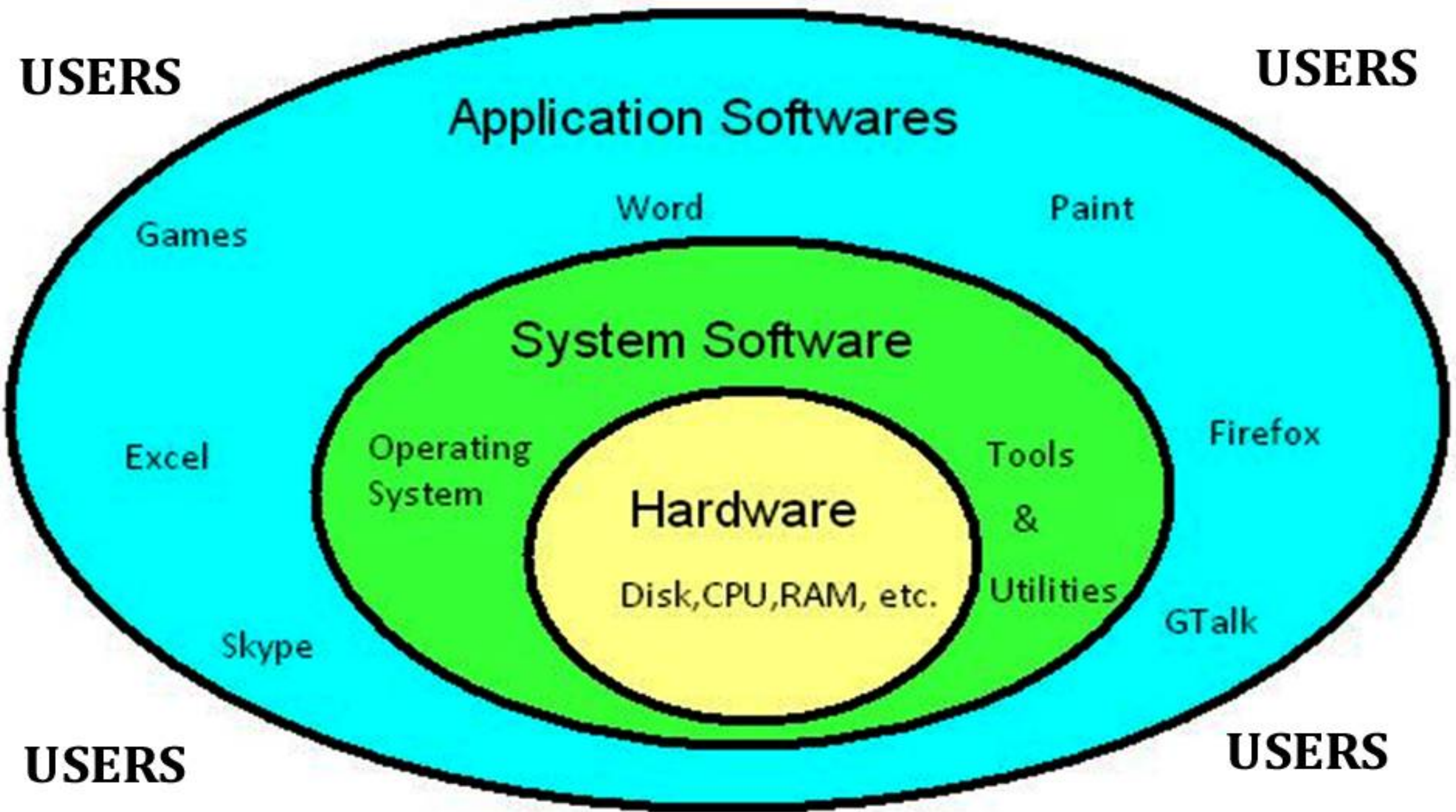
Utilities

GTalk

Skype

USERS

USERS

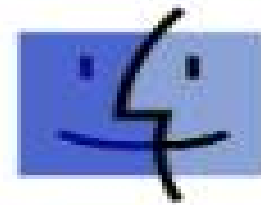


SYSTEM S/W		APPLICATION S/W	PROGRAMING
1	Operating System vki jfVx f l LVe	Hospital Mgmt. S/w fpfdR l k l k¶Vo; j	Text Editor
2	y kMj	'k{k f.kd l k¶Vo; j	dE i kby j
3	MVkc l e u t eV f l LVe (DBMS)	oM i k l l j	bUVj i Vj
4	V kU l yVj (Translator)	LiM 'khV	
5	M V k l p k j l k¶Vo; j (Data Communication Software)		
6	fMokb l M kboj (Device Driver)		

1 . SYSTEM SOFTWARE

f l L v e I k T V o ; j

SYSTEM SOFTWARE-f | LVe | k | Vo ; j



FreeBSD®

Mac OS

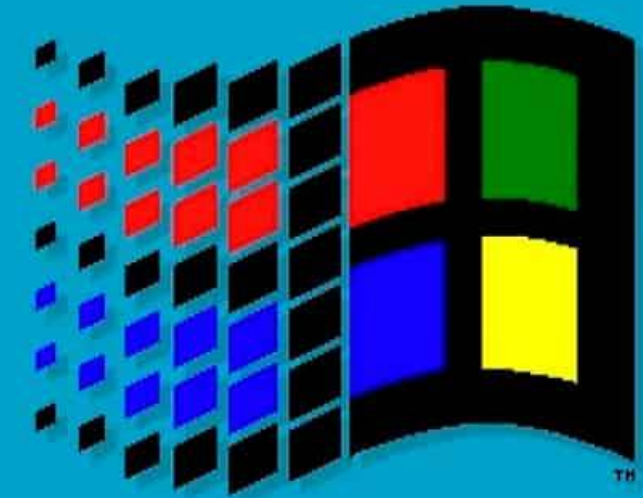


redhat.

solaris



Sun Cobalt™



MICROSOFT WINDOWSTM

Version 3.1

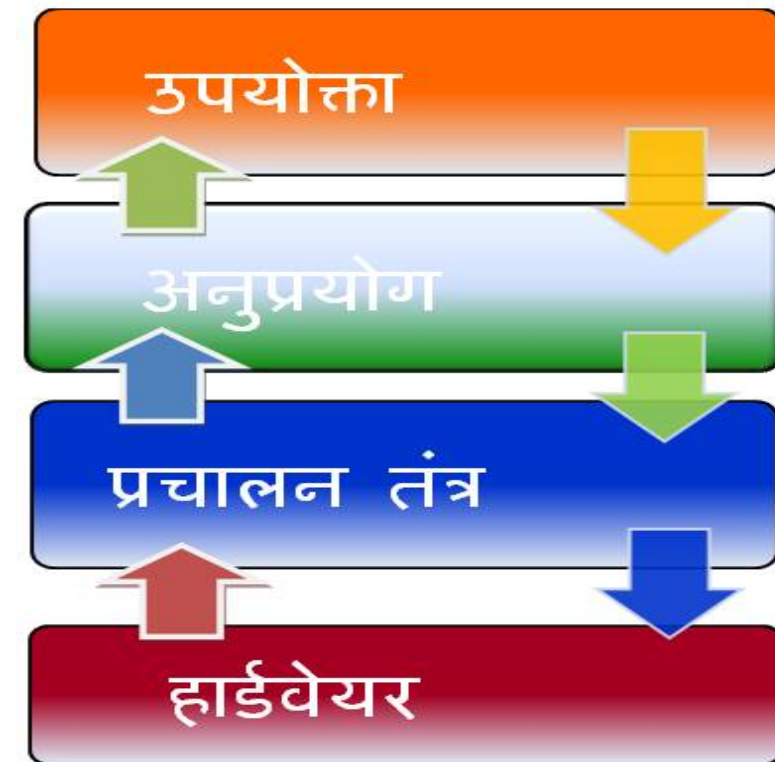
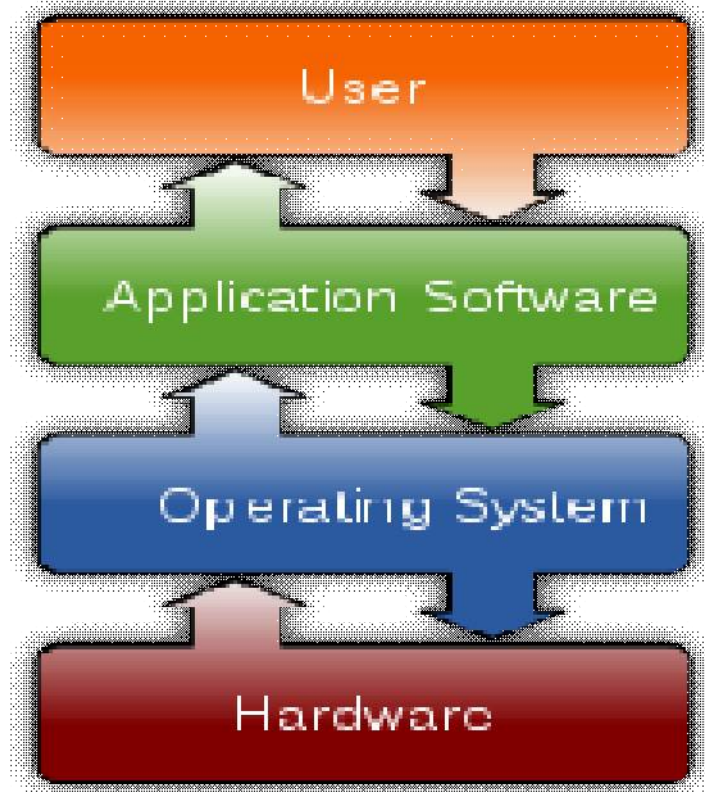
Copyright © Microsoft Corporation 1985-1992.
All Rights Reserved.

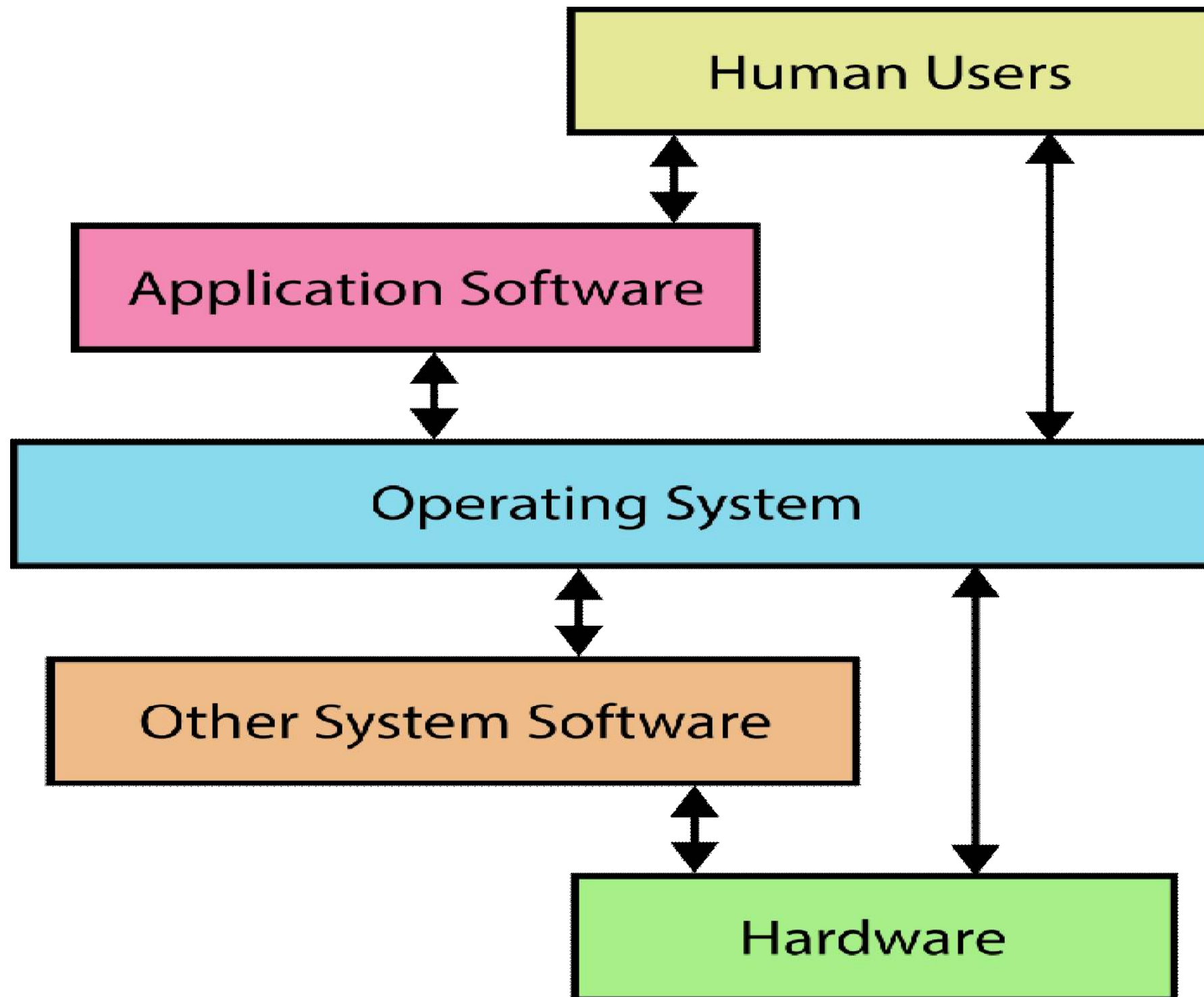




SYSTEM SOFTWARE - f l LVe l k T Vo ; j

- ; g dEl ; Vj gkMo ; j dk b l i dkj fu ; f=r djrk g fd
vu i ; kx l k T Vo ; j vPNh rjg l py l dA
t l (vk i j fVx f l LVe] fMokb l Mkboj] foMk t f l LVe
vkfnA







WIND
RIVER

eCosPro[®]



symbian
OS



ANDROID



Mac



(APPLICATION SOFTWARE)

vu;ikx I kTVo;j



ikxfex I kTVo;j

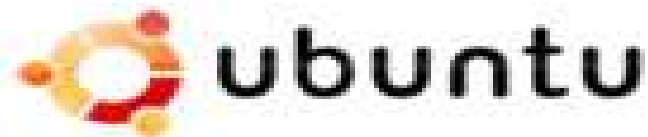
(PROGRAMMING SOFTWARE)

PROGRAMMING SOFTWARE- ikxfex

- **ij dEl;Vj ikxke fy[ku e ,d ikxkej dh l gk;rk dju d fy, midj.k inku djrk gA**
- **t l & Text editors, dEikbyj (Compiler), fM&cxj (Debugger), bUVj iVj (Interpreter) vkfnA**
- **ikxke e =fv ft l l xyr ;k vui;Dr ifj.kke mRiUu gkr g m l cx (Bug) dgr gA**
- **IkTVo;j cx d fy, bVjuV ij miyC/k NkVk ikxke tk fu'kYd fji;j djrk g] m l (Patch) ip dgr gA**
- **IkTVo;j dkM e cx <<u dh ifØ;k dk Mhcfxx (Debugging) dgr gA**

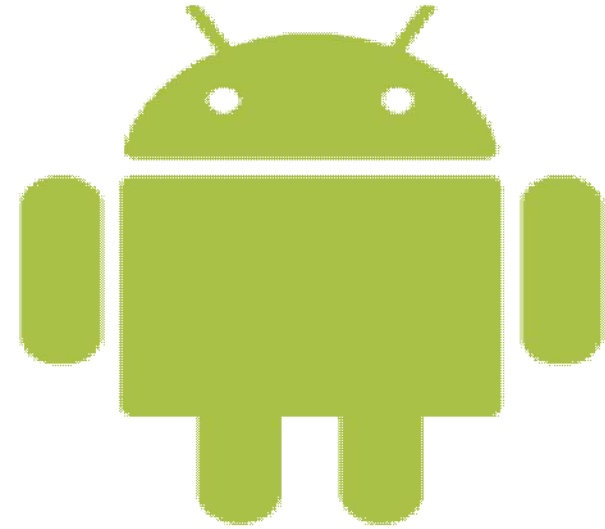


PostgreSQL



<xml/>



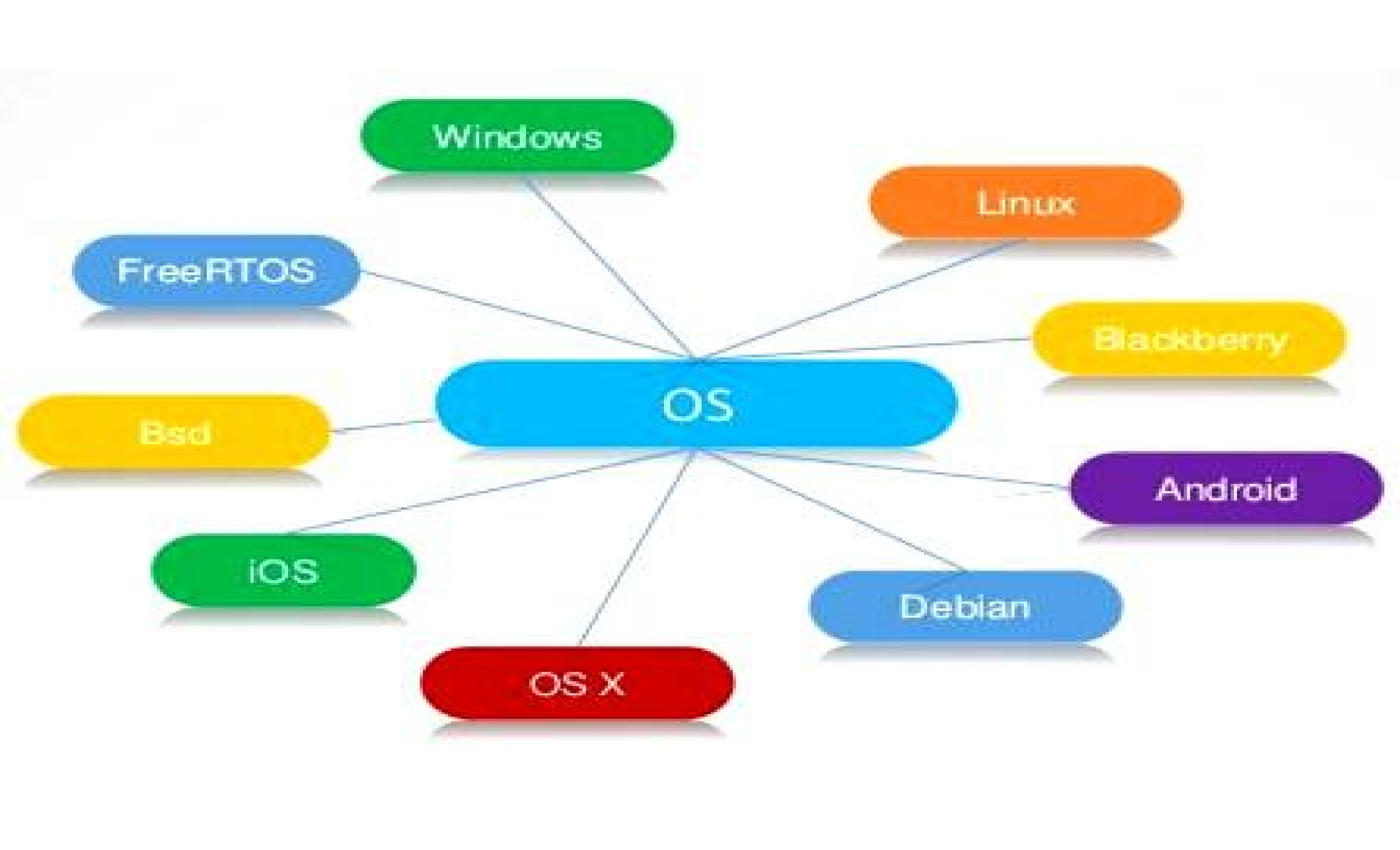


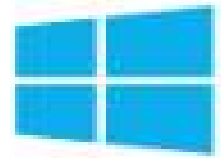
Operating System

vkijVx fLLVe

Operating System - vki jfVx f l LVe

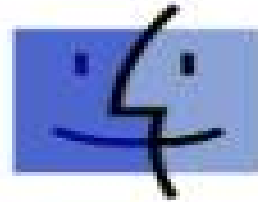
- vki jfVx f l LVe tkrk ak ;a tv g tk del;vj a tkrk
dk icf/kr (Manage) dju d fy, fMtkbu fd;k x;k g
ft l e&
- dEl;Vj dk 'k: (start) djukA
- ikxkek dk Manage djuk]
- eekjh dk Manage djuk vkj
- bu iV rFkk vkmViV fMokb l k d chp d dk;k dk l elo; djuk
'kkfey gA
- bu ifØ;k e lkj dEikuUV dEl;Vj f l LVe l Bh d l tM g
rFkk dk: di ia a :a Hkh lfuf'br ak tkrk aA





Windows

Linux™



Mac OS



FreeBSD®



redhat.

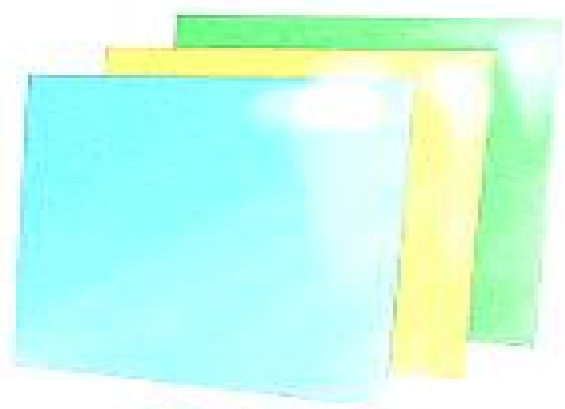
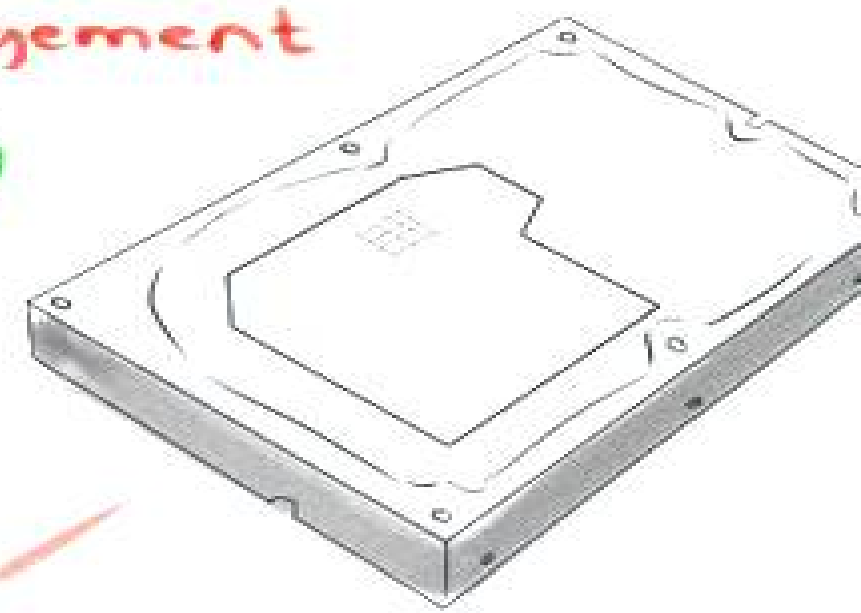
solaris



security



memory management



APPS

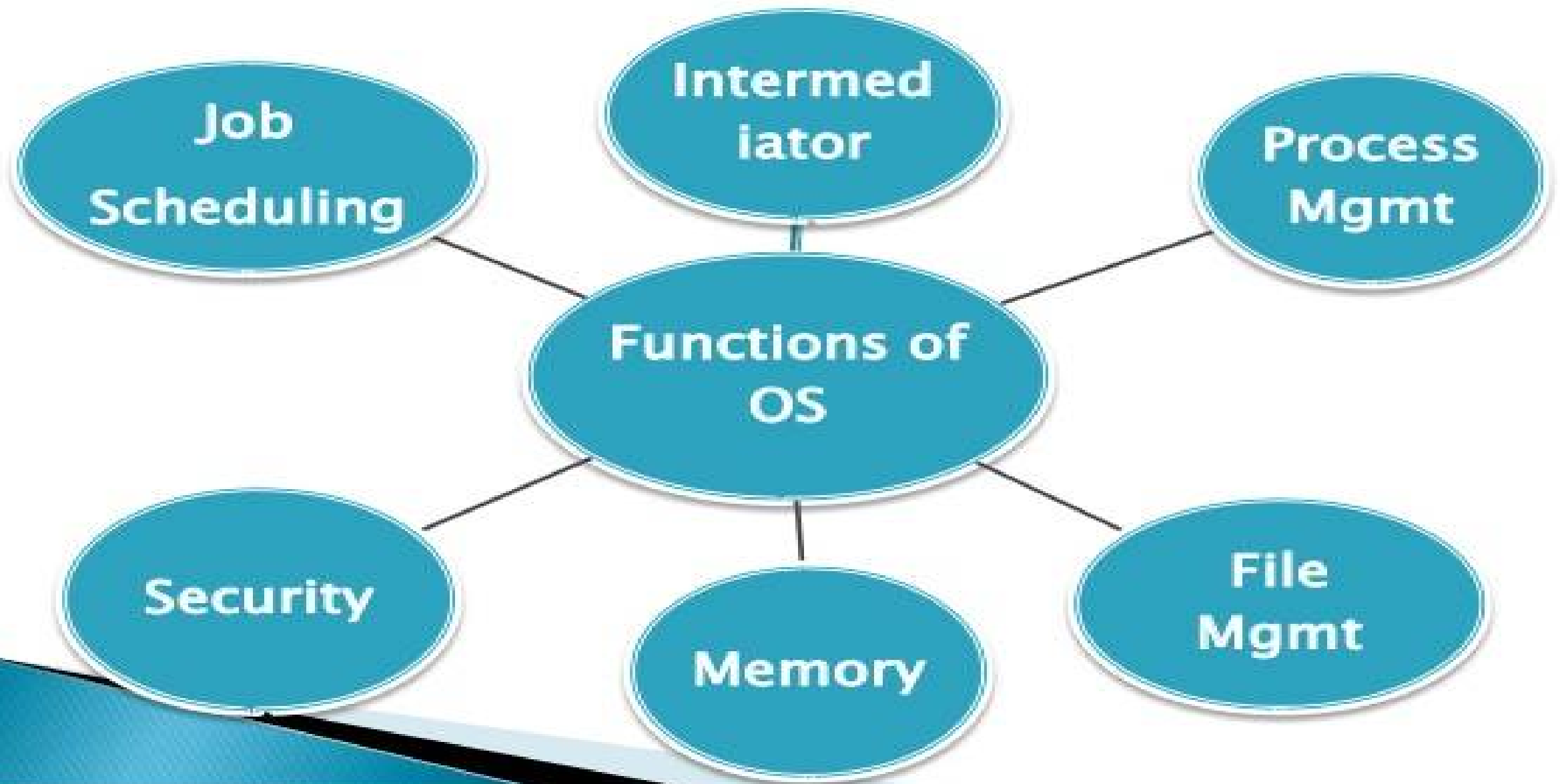
OS

user interface

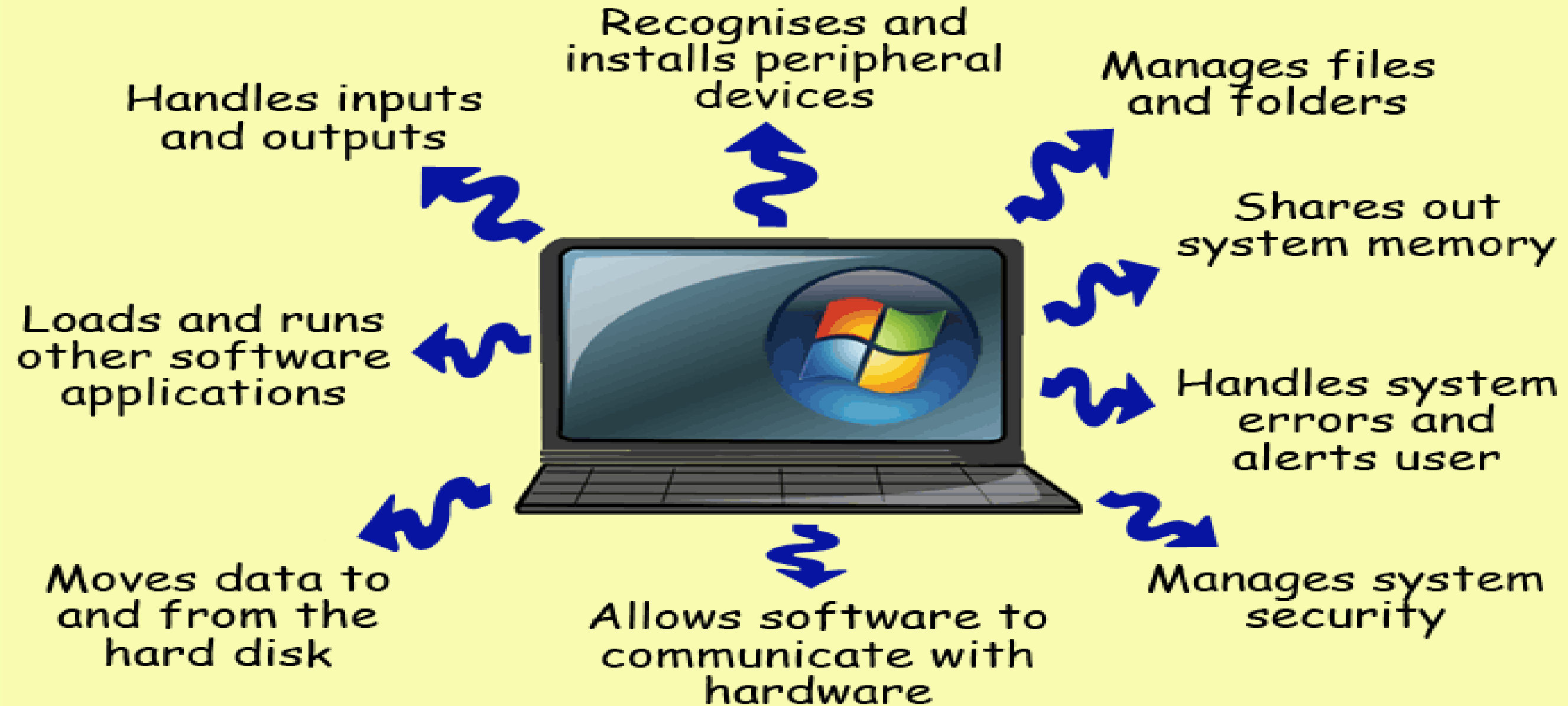
GUI

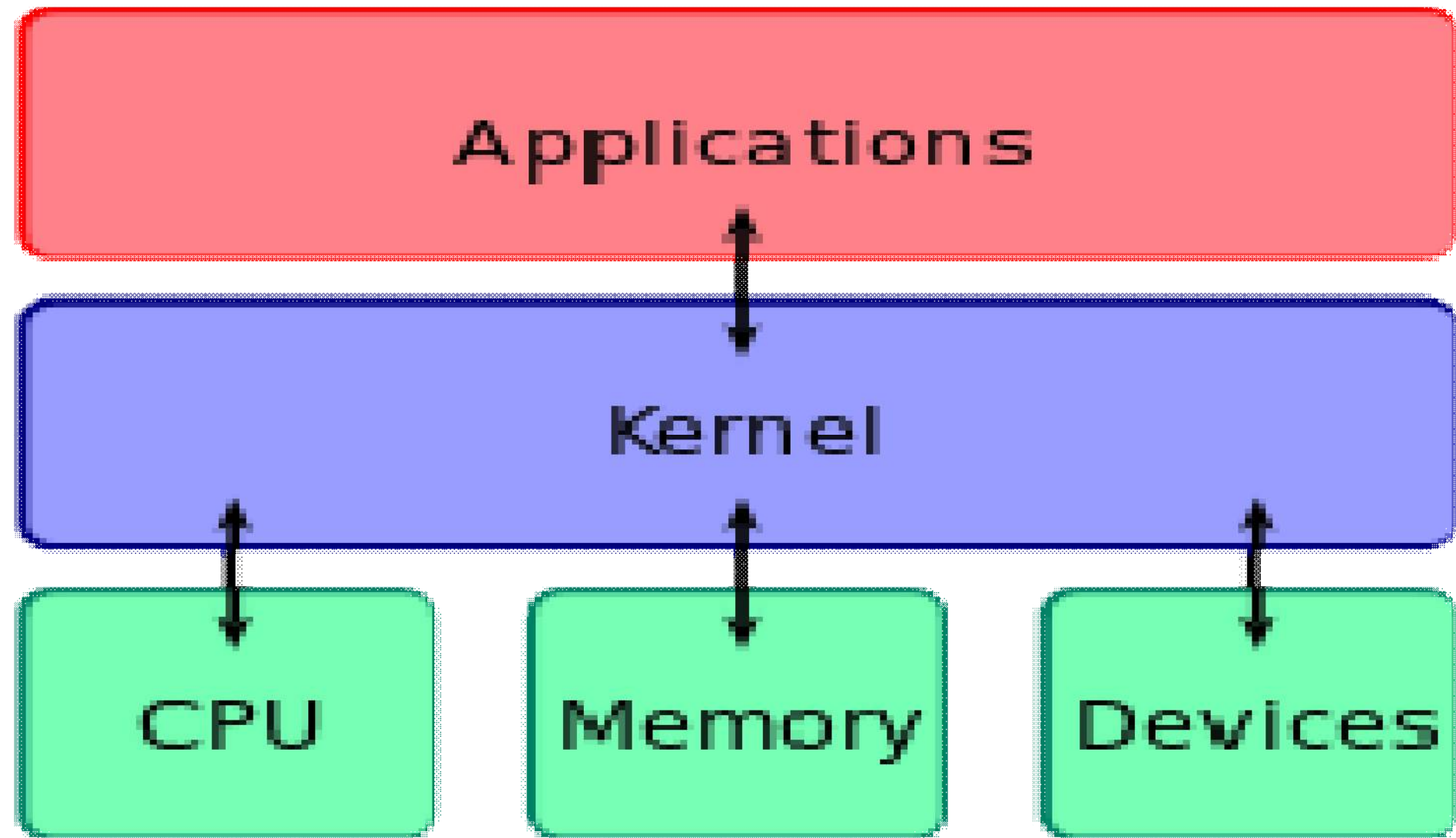


Operating System Functions



Tasks of the operating System





BIOS - ROM

- BIOS (Basic Input Output System) ROM is a type of non-volatile memory that stores the BIOS firmware.
- BIOS is a type of firmware that is stored in a non-volatile memory (ROM) and is used to initialize the hardware and load the operating system.
- BIOS is a type of firmware that is stored in a non-volatile memory (ROM) and is used to initialize the hardware and load the operating system.
- BIOS is a type of firmware that is stored in a non-volatile memory (ROM) and is used to initialize the hardware and load the operating system.

POST – Power On Self Test

- **Power On Self Test** dgr g og dEl;Vj b l VLV d nkjku fd l h =fv dk i rk gku ij **Error code** inku djrk gA
- ;g **Error code** gkMo;j t l eekjh dh&ckM] ekfuVj ,o fMLd Mkb0; e dkb dfBukb vku ij nrk gA
- **Power On Self Test** l Qyrki od l eklr gku d i'pkr **Computer On** dh ifØ;k vkjHk gkrh g ft l cfVx **(Booting)** dgr gA
- b l ifØ;k d vUrxr vkijfVx f l LVe vkjHk **(Start)** djrk gA
b l ifØ;k e vkijfVx f l LVe dk dEl;Vj l dUMjh eekjh ;k vkfD tyjh eekjh l eu eekjh ;k **RAM** e ykM djrk gA

- **dEl;Vj gkMo;j gekjh Hkk"kk ugh l e>r g] o f}vk/kkjh (Binary Number)1 vFkok 0 dh Hkk"kk l e>r g] vkijfx fLLVe] gkMo;j] ,fyd'ku fLLVe rFkk mi;xdrk d chp ,d ek/;e dk dk;| djrk gA**
- **b l dk dk;| dEl;Vj dk pykuk rFkk m l dk dke dju ;k; cuk;| j[kuk gA**
- **; gekj fn; fun'kk vFkok MVk dk e'khuh Hkk"kk e cnyrk g rFkk ifj.kke (Output) dk iu% gekjh Hkk"kk e cnydj ,d ek/;e d : i e dk;| djrk gA**
- **t l & DOS, Windows XP, Win 7, Win 8, Linux Etc.**

Types of Operating System

1 - (Single User Single Tasking Operating System)

$\text{, dy dk; vkijfVx fLLVe}$

2 - (Single User Multi Tasking Operating System)

$\text{, dy ; tj cg dk; vkijfVx fLLVe}$

3 - (Multi User Multi Tasking Operating System)

$\text{cg ; tj cg dk; vkijfVx fLLVe}$

4 - (Real Time Operating System)

$\text{okLrfod le; vkijfVx fLLVe}$

5 - (Time Sharing Operating System)

$\text{le; 'k; fjx vkijfVx fLLVe}$

6 - (Batch processing operating system)

cp iklflx vkijfVx fllVe

7 - (Multi Programming Operating System)

cg ikxfex vkijfVx fllVe

8 - (Multi Processing Operating System)

eYVh iklflx vkijfVx fllVe ;k

(Parallel Processing System)

Single User - Single Tasking Operating System

,dy dk; vkijfVx fLLVe

(Single User Single Tasking Operating System)

- **operating system** is designed to manage the computer so that one **user** can effectively do one thing at a time. The Palm **OS** for Palm handheld computers is a good example of a modern **single-user, single-task operating system**.





MS - DOS

(Micro Soft Disc Operating System)

- 0;kid : i l i luy dEl;Vj e LFkfi r (Installed) ekbØk l kTV
dk iFke vkijVx fLLVe FkA
- ;g l jy xj l fpr (Non-graphical), dekM ykbu vkijVx
fLLVe gA
- ;g l jy g i jUr ;tj ÝUMyh ugh] D;kfd b l e dekM ;kn
j[kuk gkrk gA
- b l dk l okf/kd ykdfi; lLdj.k 7-0 gA

Starting MS-DOS...

C:\>_

MS-DOS (Microsoft disk operating system)

Welcome to the FreeDOS 1.1 operating system (<http://www.freedos.org>)

C:\>ver /r

FreeCom version 0.84-pre2 XMS_Swap [Aug 28 2006 00:29:00]

DOS version 7.10

FreeDOS kernel 2040 (build 2040 OEM:0xfd) [compiled Jun 21 2011]

C:\>ctmouse

CuteMouse v2.1 beta4 [FreeDOS]

Installed at PS/2 port

C:\>dir

Volume in drive C is FREEDOS2012

Volume Serial Number is 0844-16E5

Directory of C:\

FDOS		<DIR>	01-06-2013	3:08p
AUTOEXEC	BAT	1,235	01-06-2013	3:12p
BOOTSECT	BIN	512	01-06-2013	3:12p
COMMAND	COM	66,945	08-28-2006	7:37p
FDCONFIG	SYS	848	01-06-2013	3:12p
KERNEL	SYS	45,344	06-21-2011	8:39p
	5 file(s)		114,884 bytes	
	1 dir(s)		4,002 Mega bytes free	

C:\>_

Current date is Tue 1-01-1980
Enter new date:
Current time is 7:48:27.13
Enter new time:

The IBM Personal Computer DOS
Version 1.10 (C)Copyright IBM Corp 1981, 1982

A>dir/w

COMMAND	COM	FORMAT	COM	CHKDSK	COM	SYS	COM	DISKCOPY	COM
DISKCOMP	COM	COMP	COM	EXE2BIN	EXE	MODE	COM	EDLIN	COM
DEBUG	COM	LINK	EXE	BASIC	COM	BASICA	COM	ART	BAS
SAMPLES	BAS	MORTGAGE	BAS	COLORBAR	BAS	CALENDAR	BAS	MUSIC	BAS
DONKEY	BAS	CIRCLE	BAS	PIECHART	BAS	SPACE	BAS	BALL	BAS
COMM	BAS								

26 File(s)

A>dir command.com

COMMAND	COM	4959	5-07-82	12:00p
---------	-----	------	---------	--------

1 File(s)

A>

MAGGIELAND DIZZY



A YUMMY CAKE!!

NOTHING!

NOTHING!

EXIT AND DONT DROP

CHOOSE ITEM TO
SELECT OR DROP

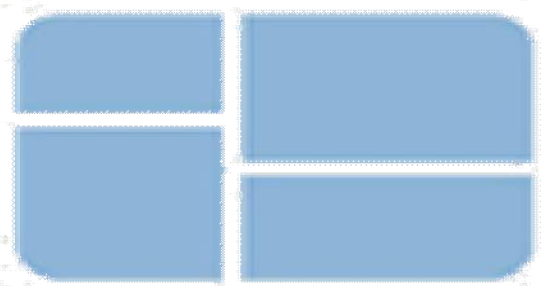
Single User - Multi Tasking Operating System

Single User - Multi Tasking Operating System

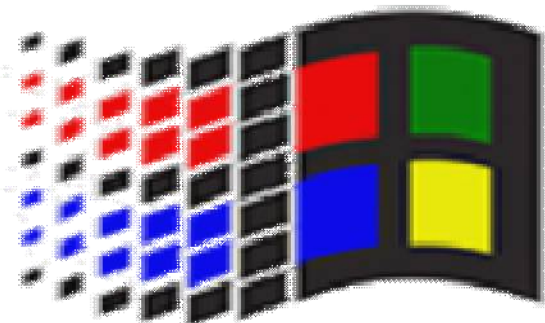


(Microsoft windows) , e , l foMk t

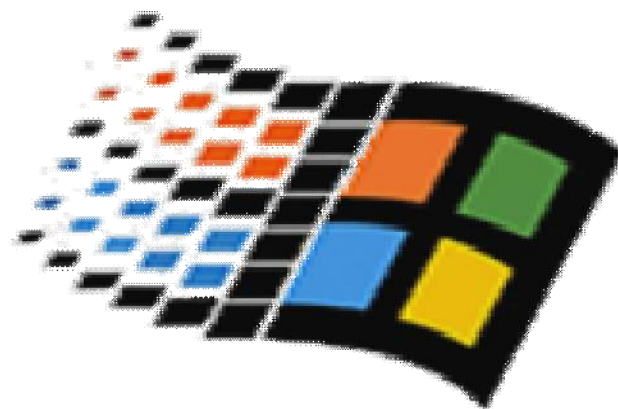
- ;g ekbØk l kV }kjk foadl r xkfQay ;tj bVjQ l vkijfVx f l LVe gA
- ble ,e , l Mk l d dfe;k dk /;ku e j[kk x;k rFkk bl ;tj ÝMyh cuk;k x;kA
- bld vU; l Ldj.k foMk t &95] foMk t &98] foMk t ,D l ih] foMk t foLVk] foMk t 7] foMk t 8] foMk t 10 gA
- lokf/kd oreku loj l Ldj.k foMk t loj 2008 gA bl



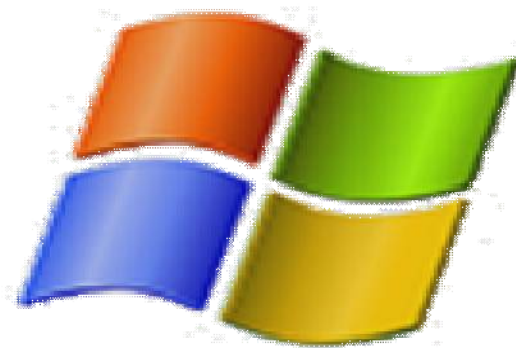
1.0 (1985)



3.1 (1992)



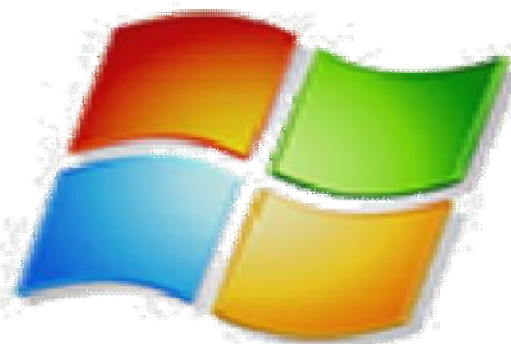
95 (1995)



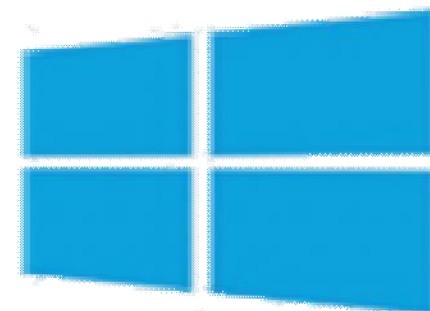
XP (2001)



Vista (2006)



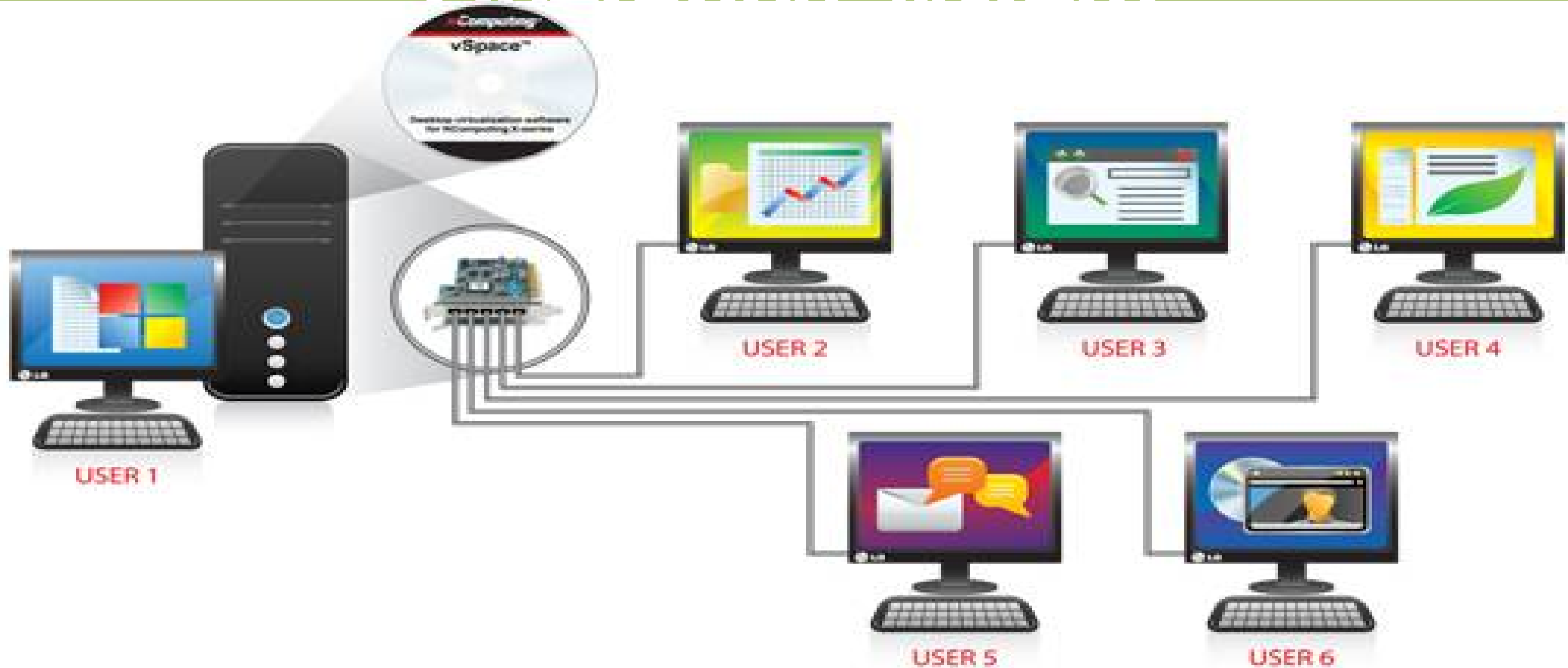
7 (2009)

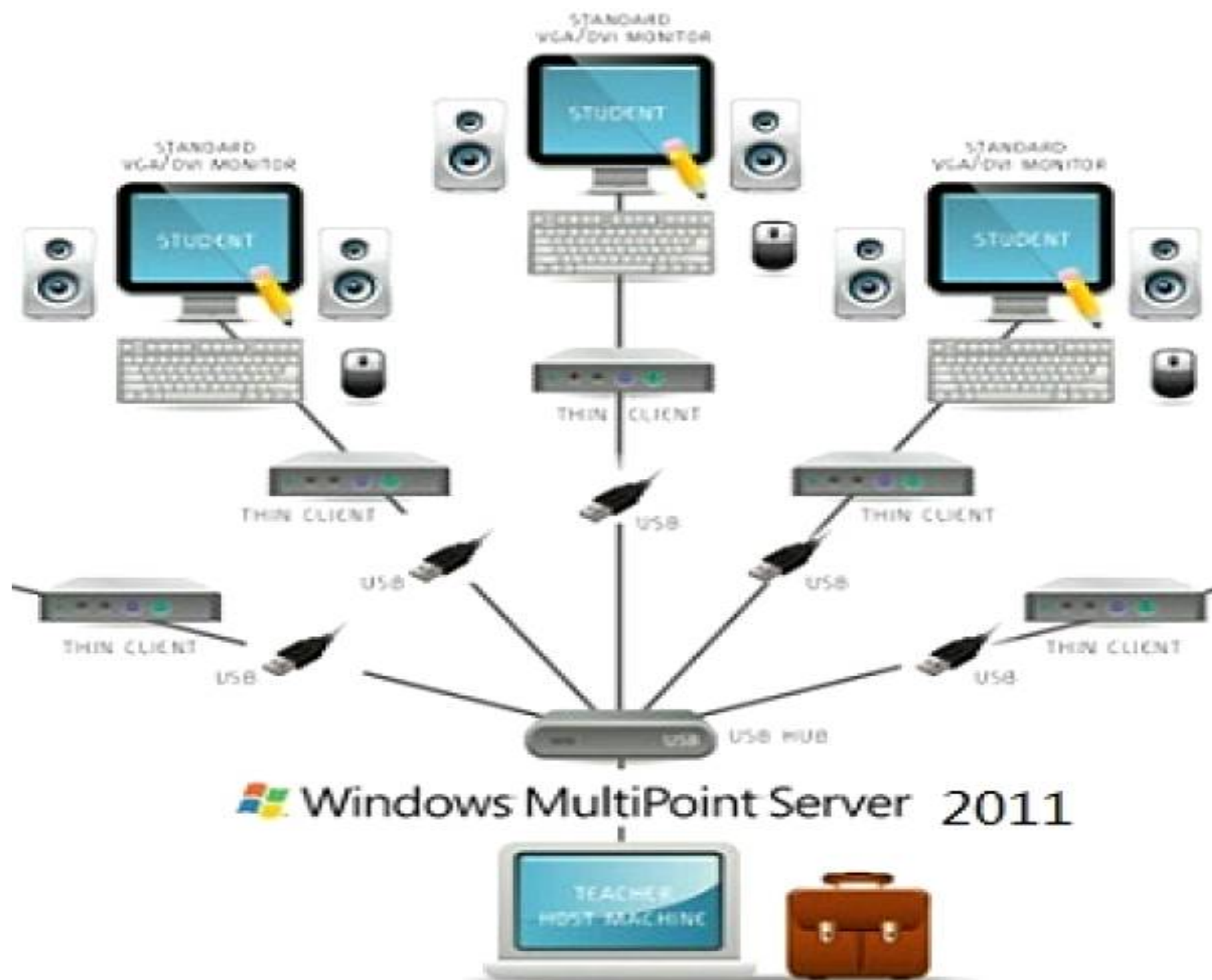


8 (2012)

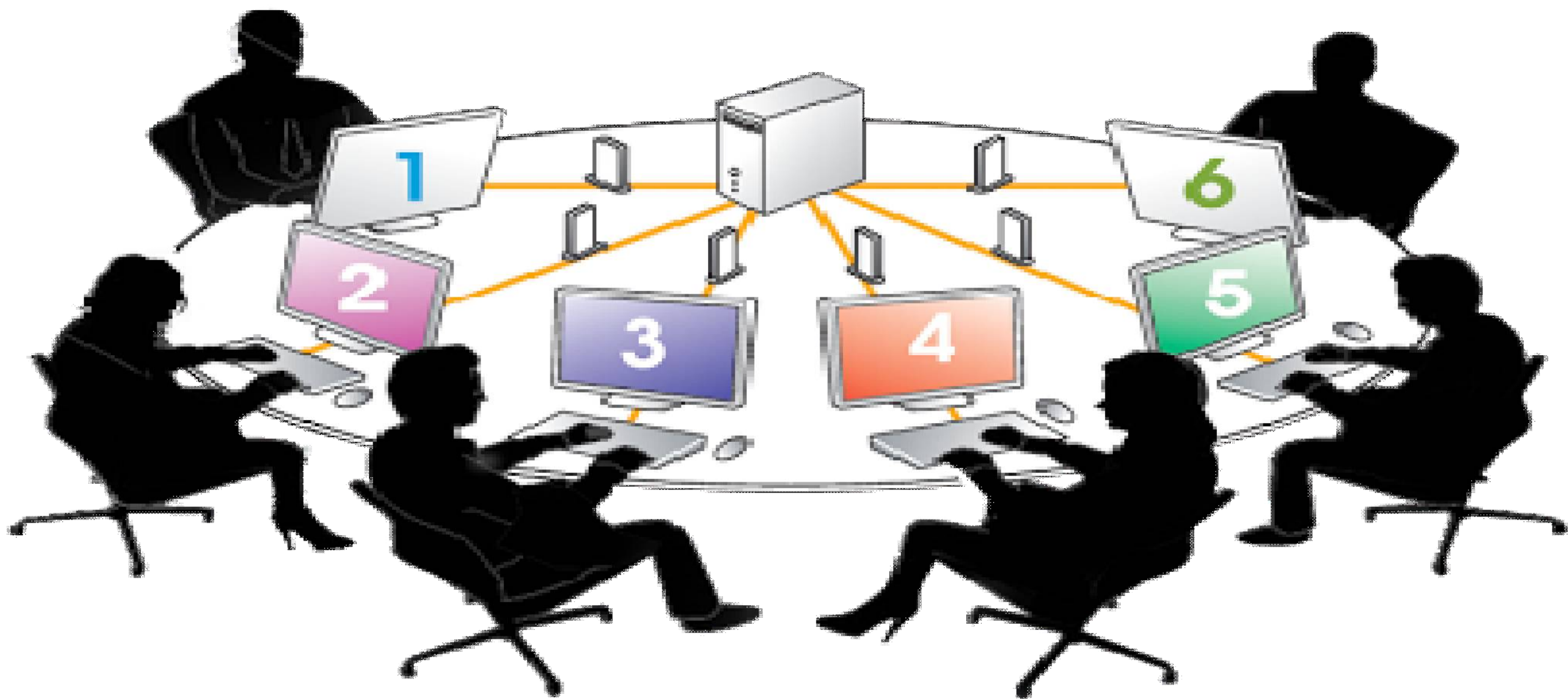
Multi User - Multi Tasking Operating System

Multi User - Multi Tasking Operating System

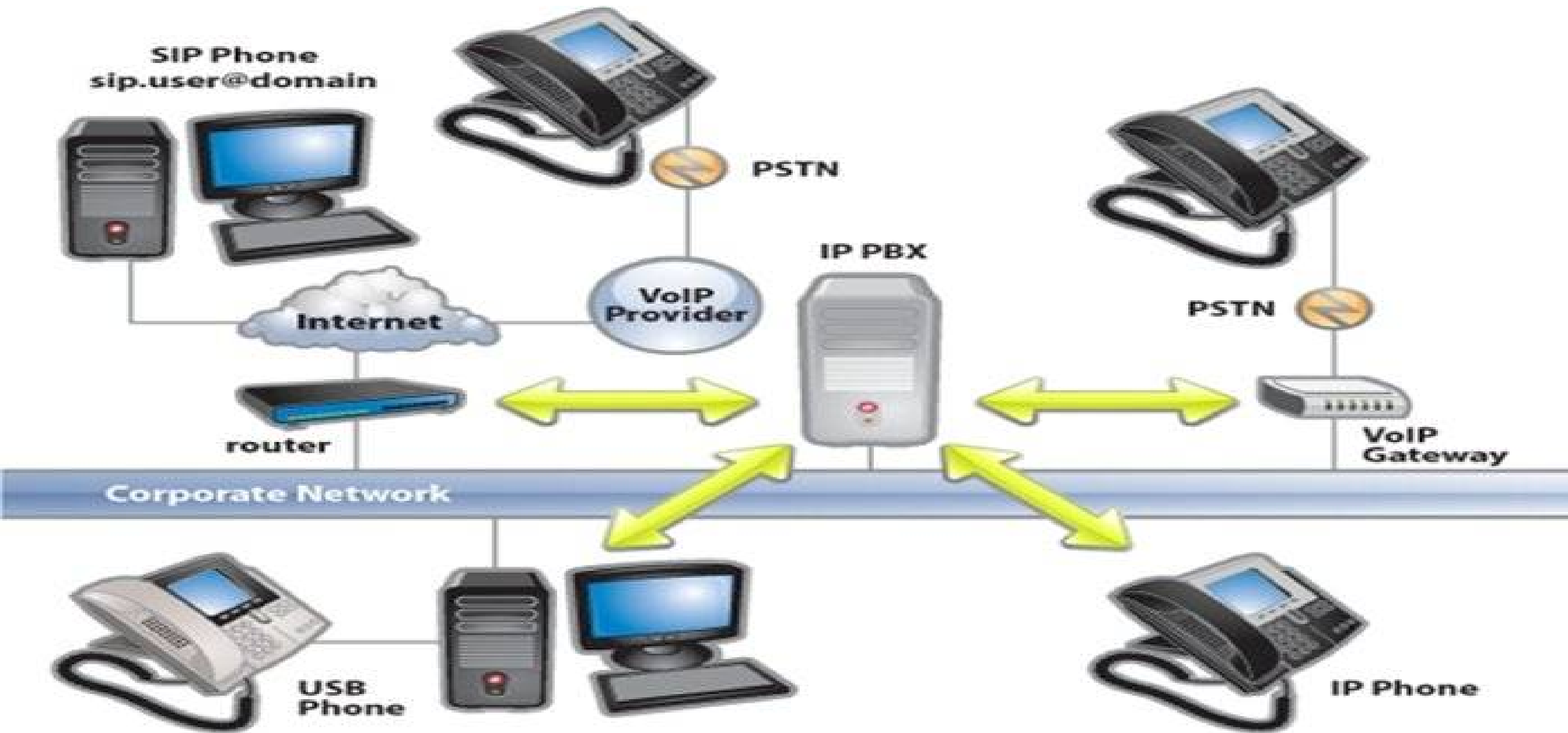




 Windows MultiPoint Server 2011









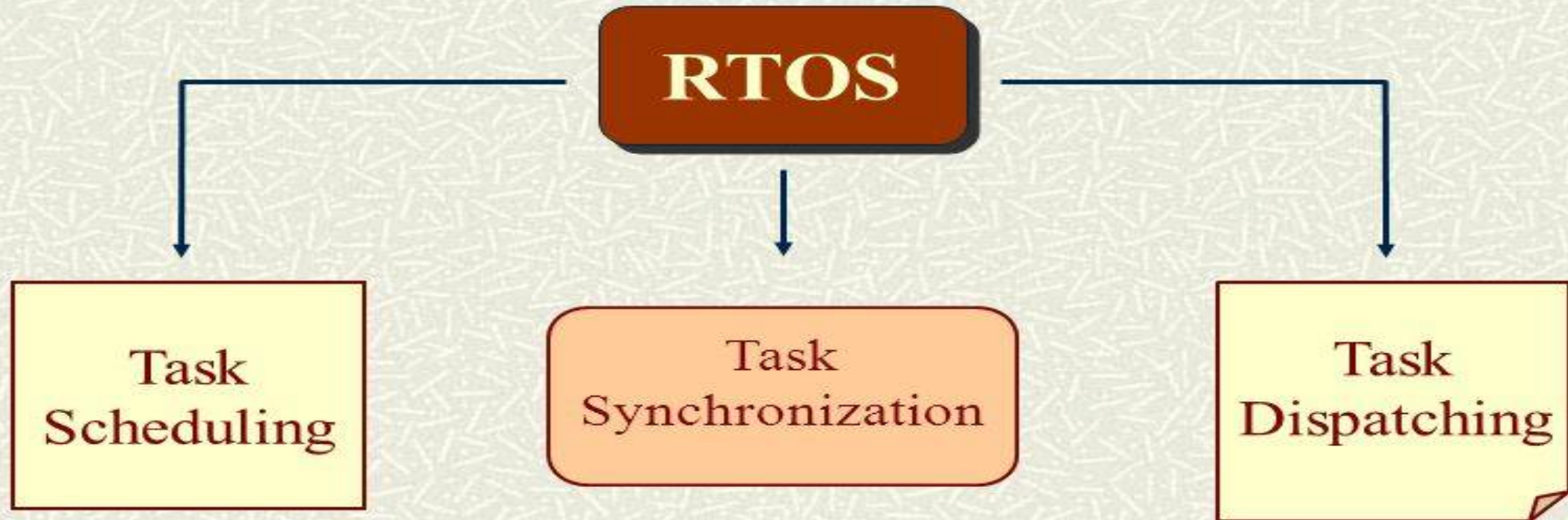
Real Time Operating System

Real Time Operating System

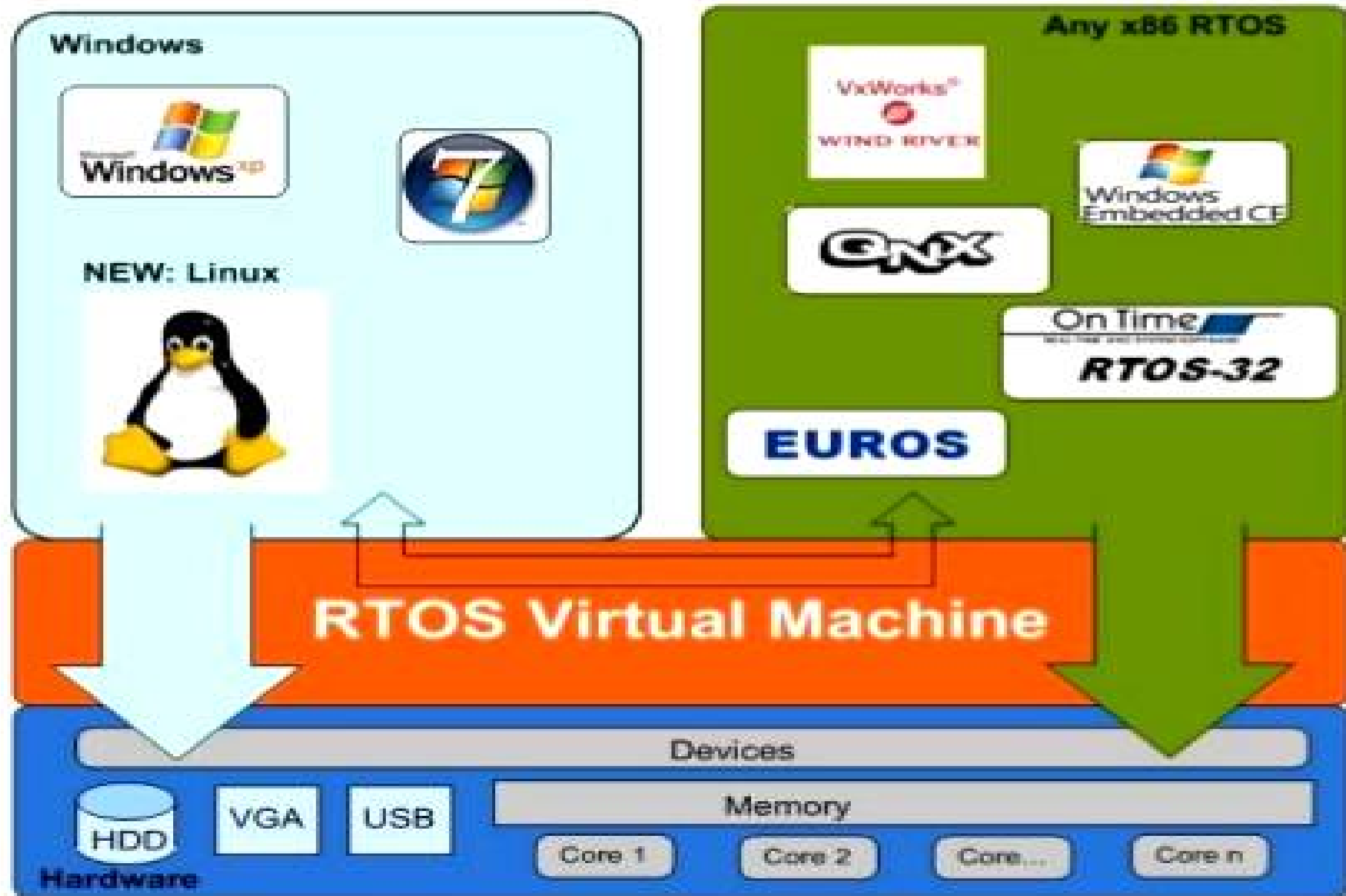
- **Response time** is the time taken by the system to respond to a request.
- **Dead time** is the time taken by the system to respond to a request after the request has been received.
- **Throughput** is the number of requests that the system can handle in a given time.
- **Latency** is the time taken by the system to respond to a request after the request has been received.
- **Bandwidth** is the amount of data that can be transferred in a given time.

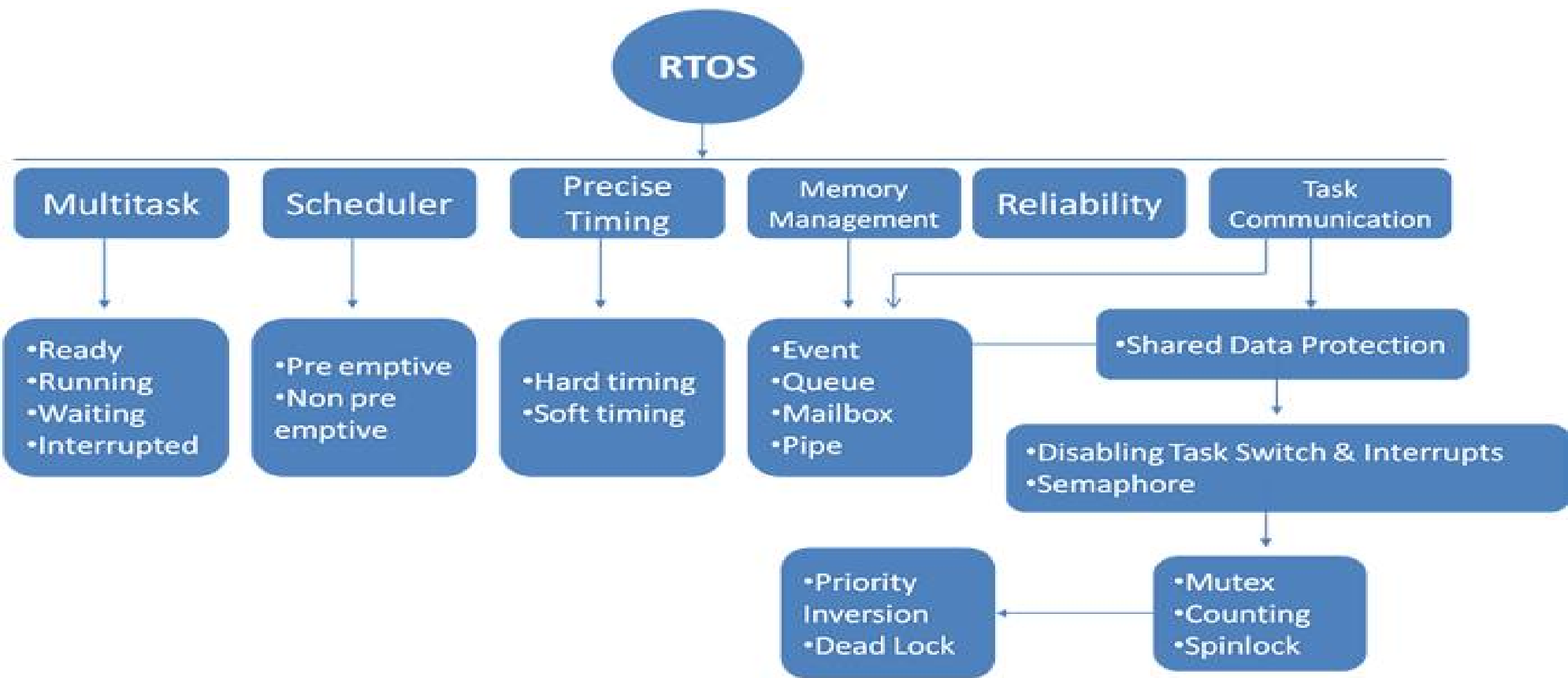
Real-Time Operating Systems

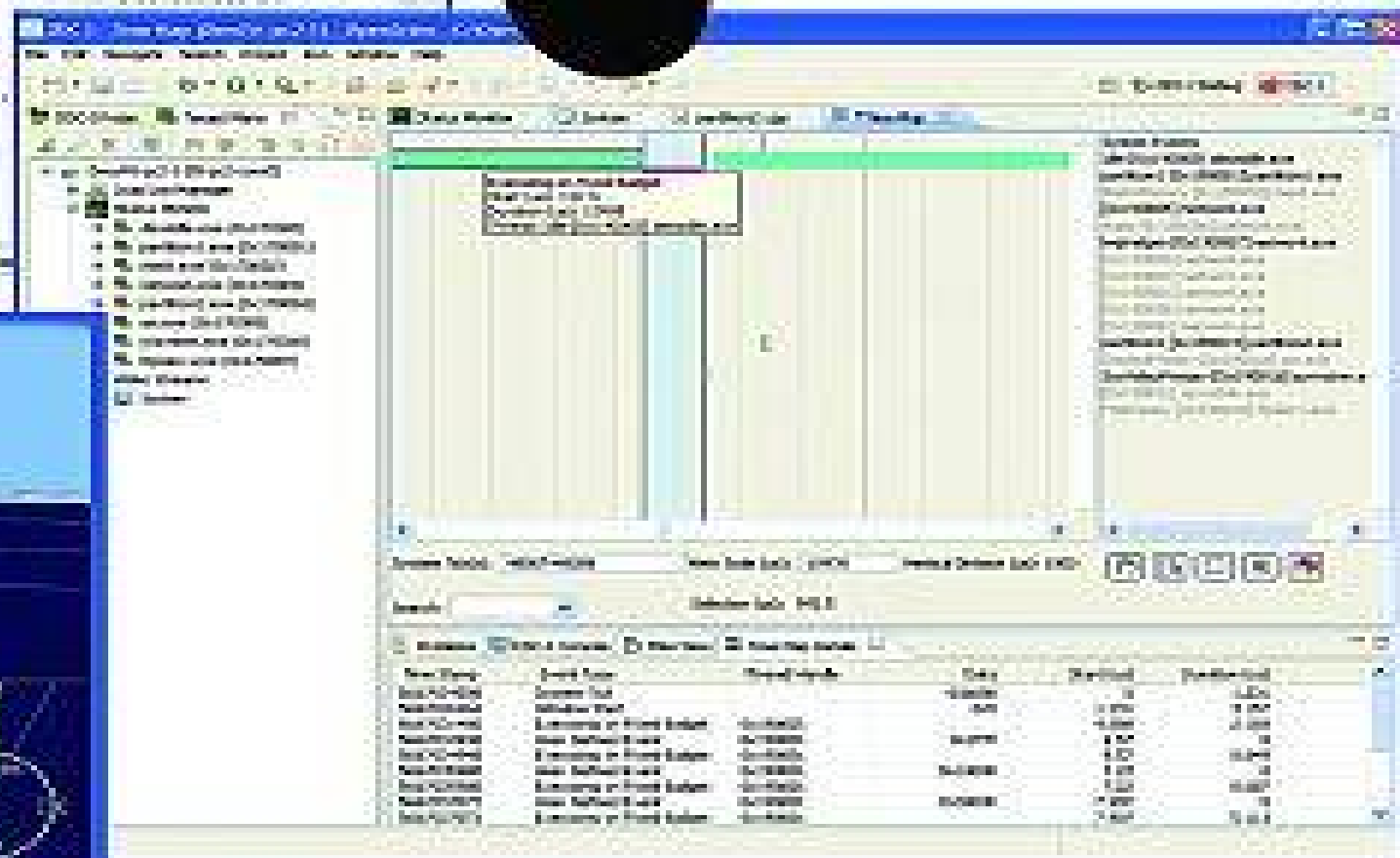
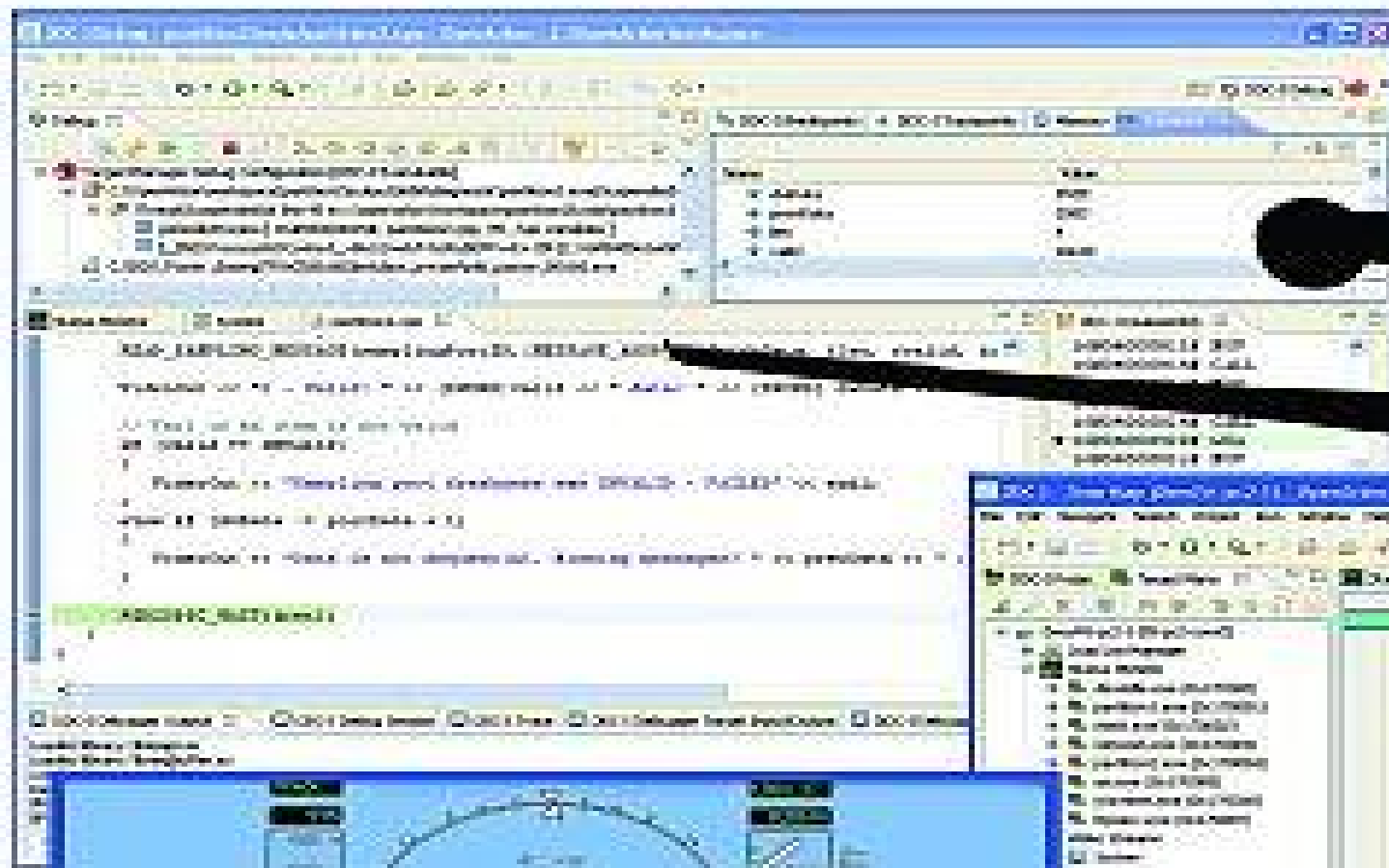
Overview













Rockwell
Collins

MAX DELTA P HI
TO LOG = 0.2 psi

SELOL
DJ-GR

PT-ZFV

Rockwell Collins

Rockwell Collins

Rockwell Collins

Rockwell Collins



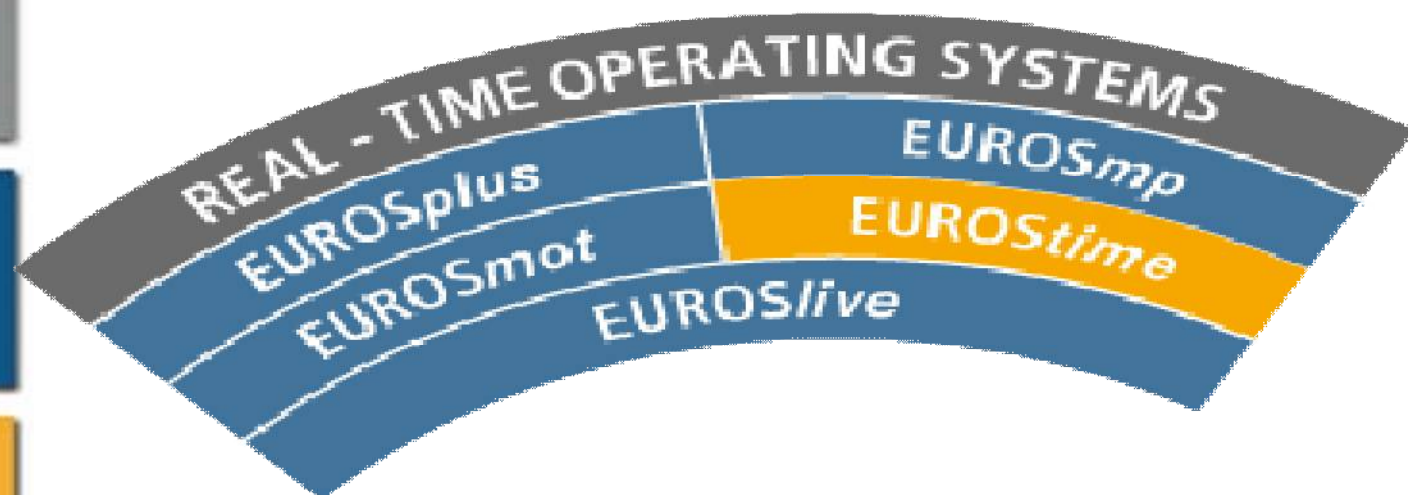
ASTRONICS
TEST SYSTEMS

CTS-6000 SERIES









Time Sharing Operating System

Time Sharing Operating System

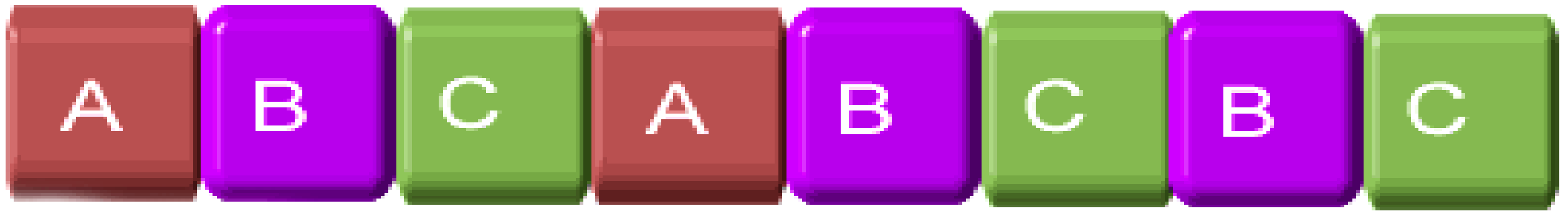
- **Time-sharing** is a technique which enables many people, located at various terminals, to use a particular computer **system** at the same **time**.
- **Time-sharing** or multitasking is a logical extension of multiprogramming.
- Processor's **time** which is **shared** among multiple users simultaneously is termed as **time-sharing**.

Time Sharing Operating System

- In a time sharing operating system, the processor time is shared among multiple users. Each user's process is executed for a small slice of time, and then the processor switches to the next user's process. This allows multiple users to interact with the system simultaneously.

- In a time sharing operating system, the processor time is shared among multiple users. Each user's process is executed for a small slice of time, and then the processor switches to the next user's process. This allows multiple users to interact with the system simultaneously.

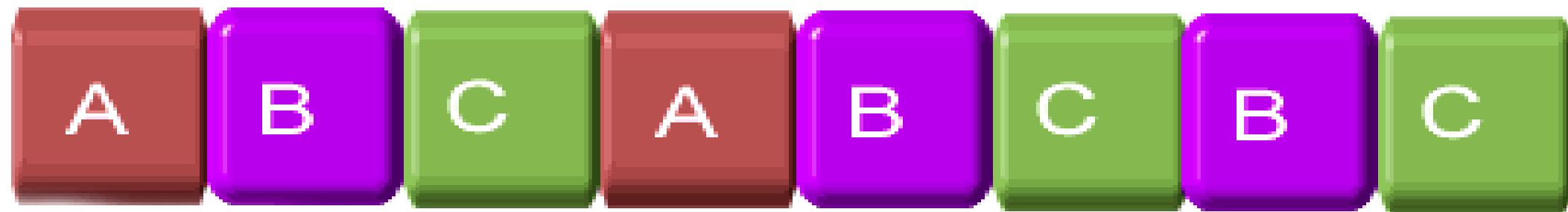
Multiuser operating system share Processor time



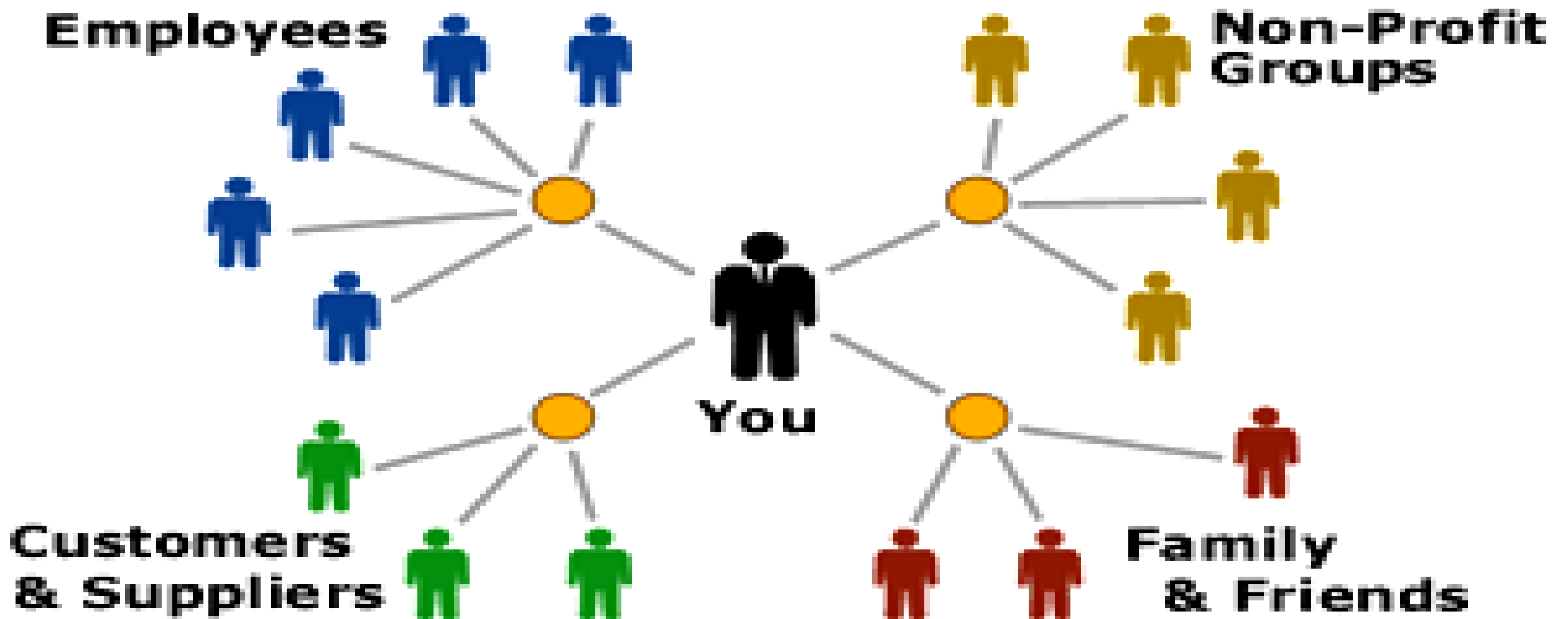
Time Slices



Multiuser operating system share Processor time



Time Slices



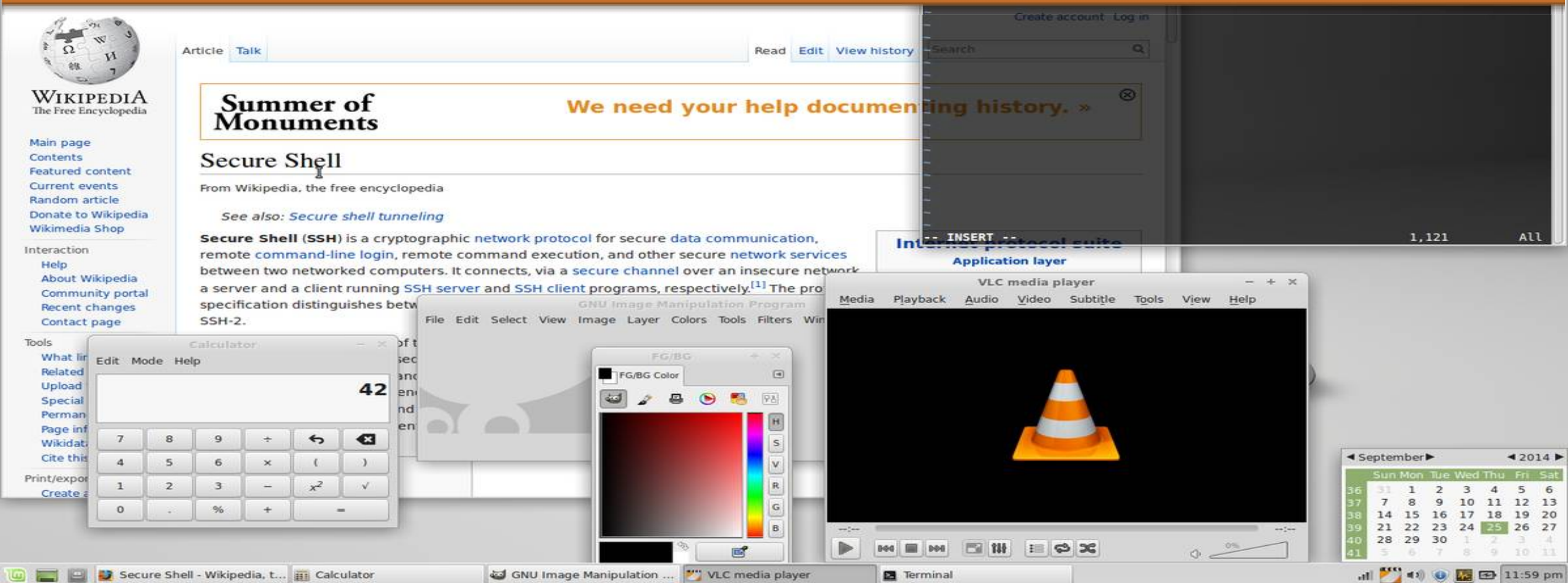


Multi Programming Operating System

Multi Programming

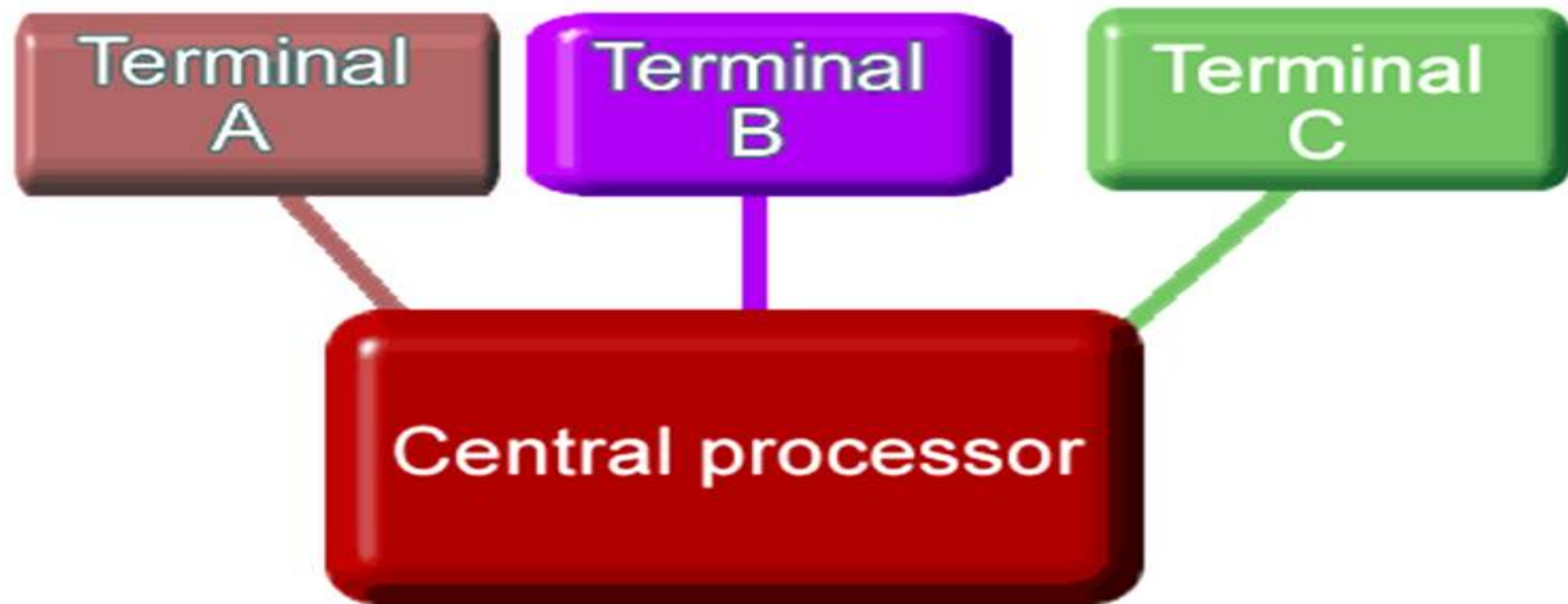
- Multitasking has the same meaning of **multiprogramming** but in a more general sense, as it refers to having multiple (programs, processes, tasks, threads) running at the same time. This term is used in modern **operating systems** when multiple tasks share a common processing resource (e.g., CPU and Memory).

Multi Programming Operating System



Multi Programming Operating System

- , l f l LVe e v k i j f v x f l LVe } k j k , d l v f / k d i k x k e
; k d k ; ! , d g h l k F k d k ; ! d j r g A
- g j d k ; ! d k CPU d k , d f u f ' p r l e ; f n ; k t k r k g
f t l V k b e L y k b f l x d g r g A



Multiuser operating system share Processor time



Time Slices

Multi Programming

- When two or more programs are residing in memory at the same time, then sharing the processor is referred to the multiprogramming.
- Multiprogramming assumes a single shared processor.
- Multiprogramming increases CPU utilization by organizing jobs so that the CPU always has one to execute.

Multi Programming

- Multiprogramming is the first example of a fairly sophisticated operating system since for the first time the operating system is making choices for the user(s).
- Future topics raised by multiprogramming
 - Job/CPU scheduling
 - Memory management
 - Job interaction

Multi Programming

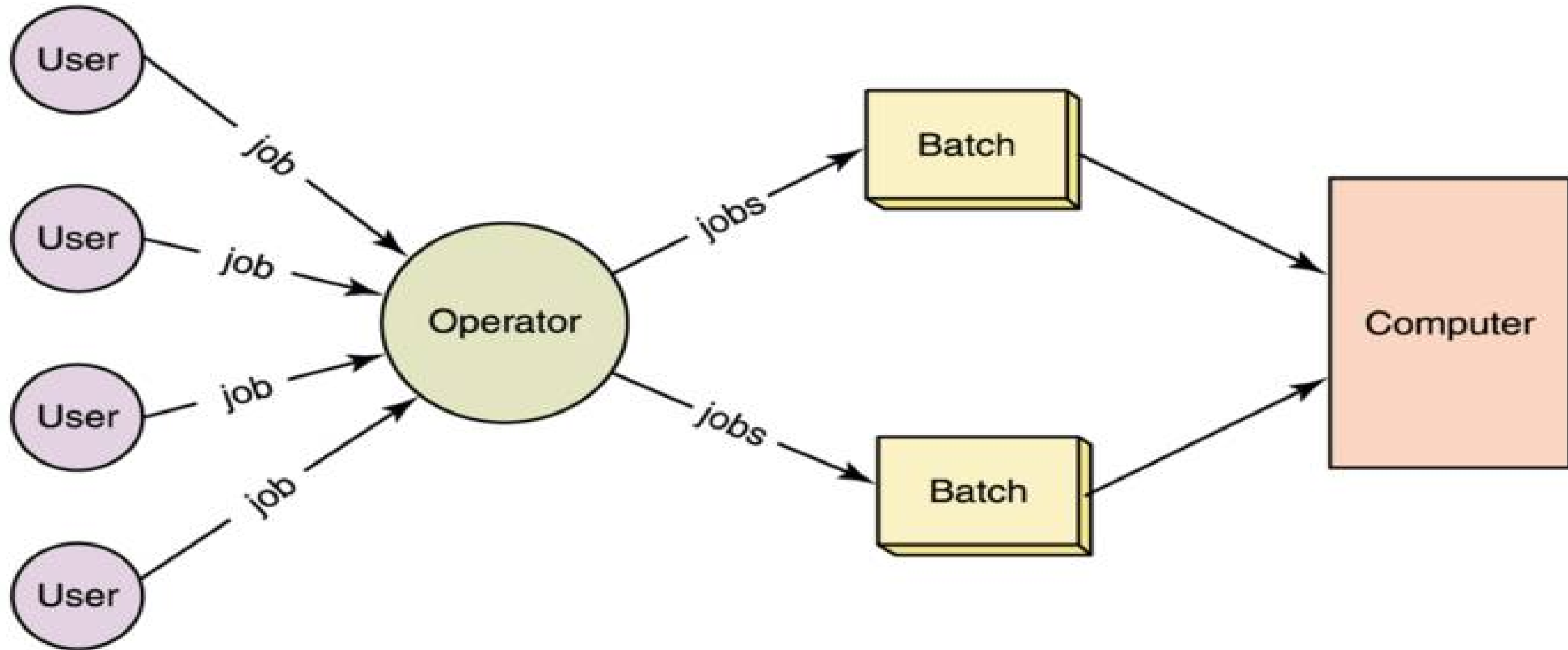
- IS A SIMULTANEOUS EXECUTION OF TWO OR MORE programs by the same computer.
- One or more programs are executed at the same time.
- Different scheduling techniques are:-
 - ✓ First come first serve
 - ✓ Round robin (RR)
 - ✓ Shortest job first (SJF)

Batch Processing Operating System

Batch Processing Operating System

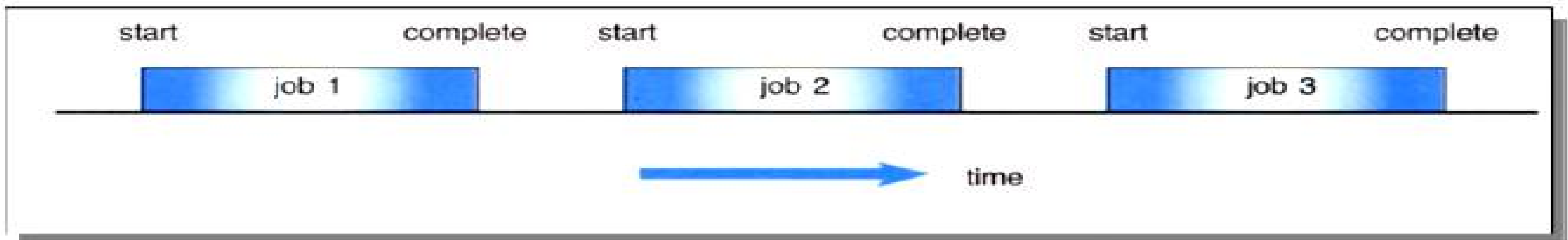
- **OT fLVe e ake teg e gkrk gj vFkr vkrjvx
fLVe tc lkj dk; leg e ;tj d gLr{k d fcuk
ikFkedrk d vk/kj ij djrk g rk ml fLVe dk cp
iklfxx fLVe dgr gA**
- **t l & ijky (Payroll) cukuk] fcfyx (Billing) vkfn**

Batch Processing



Batch Processing

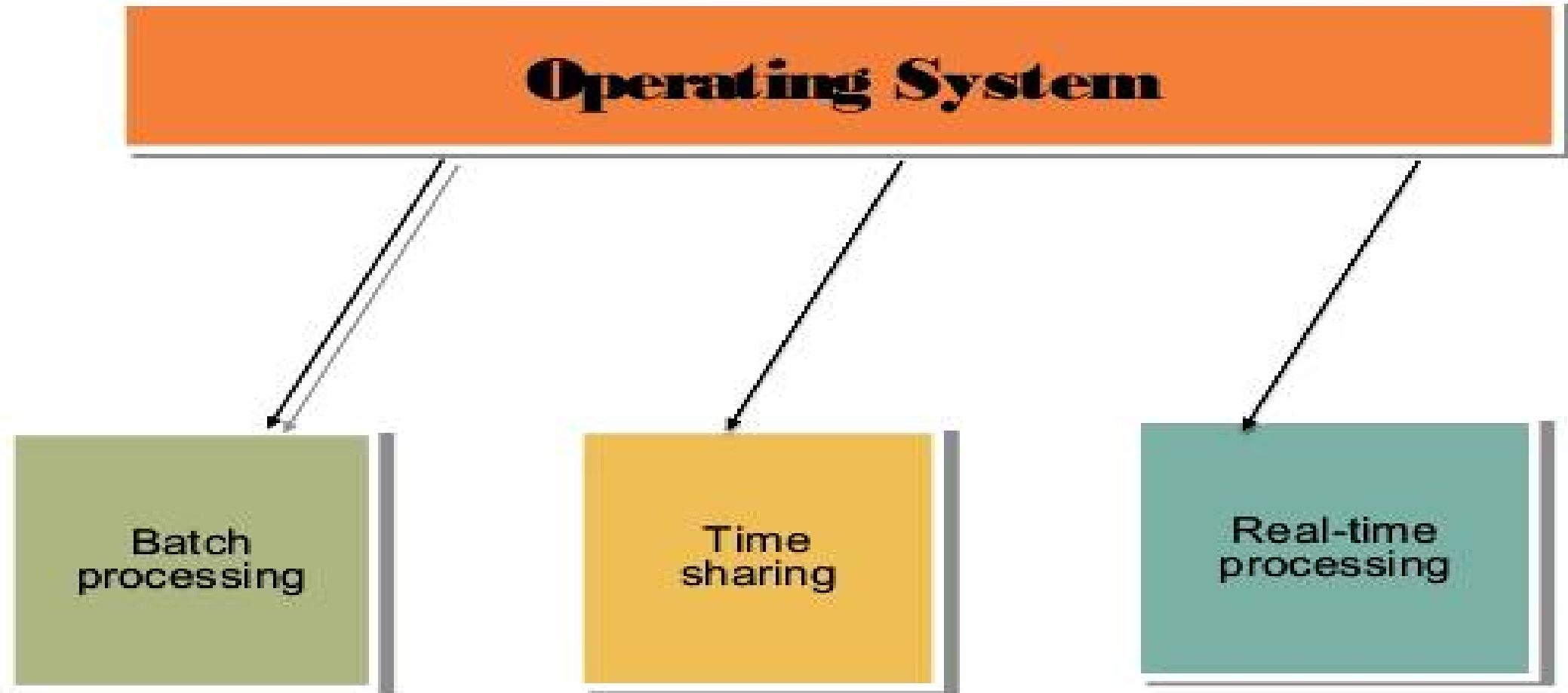
- Jobs, together with input data, are fed into the system in a batch.
- The jobs are then run one after another.
- No job can be started until previous job is completed



Batch Processing

- In Batch processing same type of jobs batch (*BATCH- a set of jobs with similar needs*) together and execute at a time.
- The OS was simple, its major task was to transfer control from one job to the next.
- The job was submitted to the computer operator in form of punch cards. At some later time the output appeared.
- The OS was always resident in memory.
- Common Input devices were card readers and tape drives.

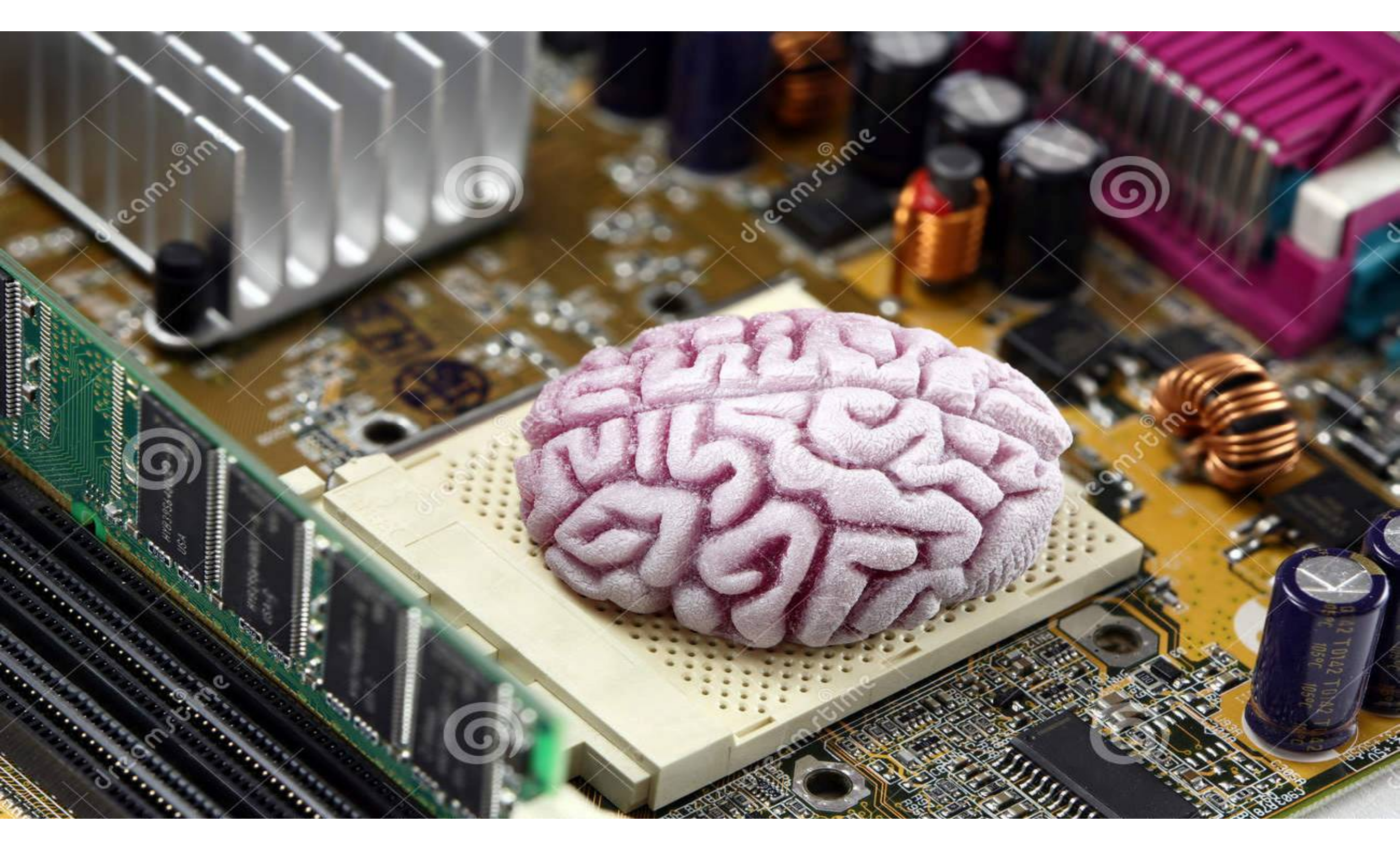
Operating System - Evolution



Multi Processing Operating System

MICRO PROCESSOR

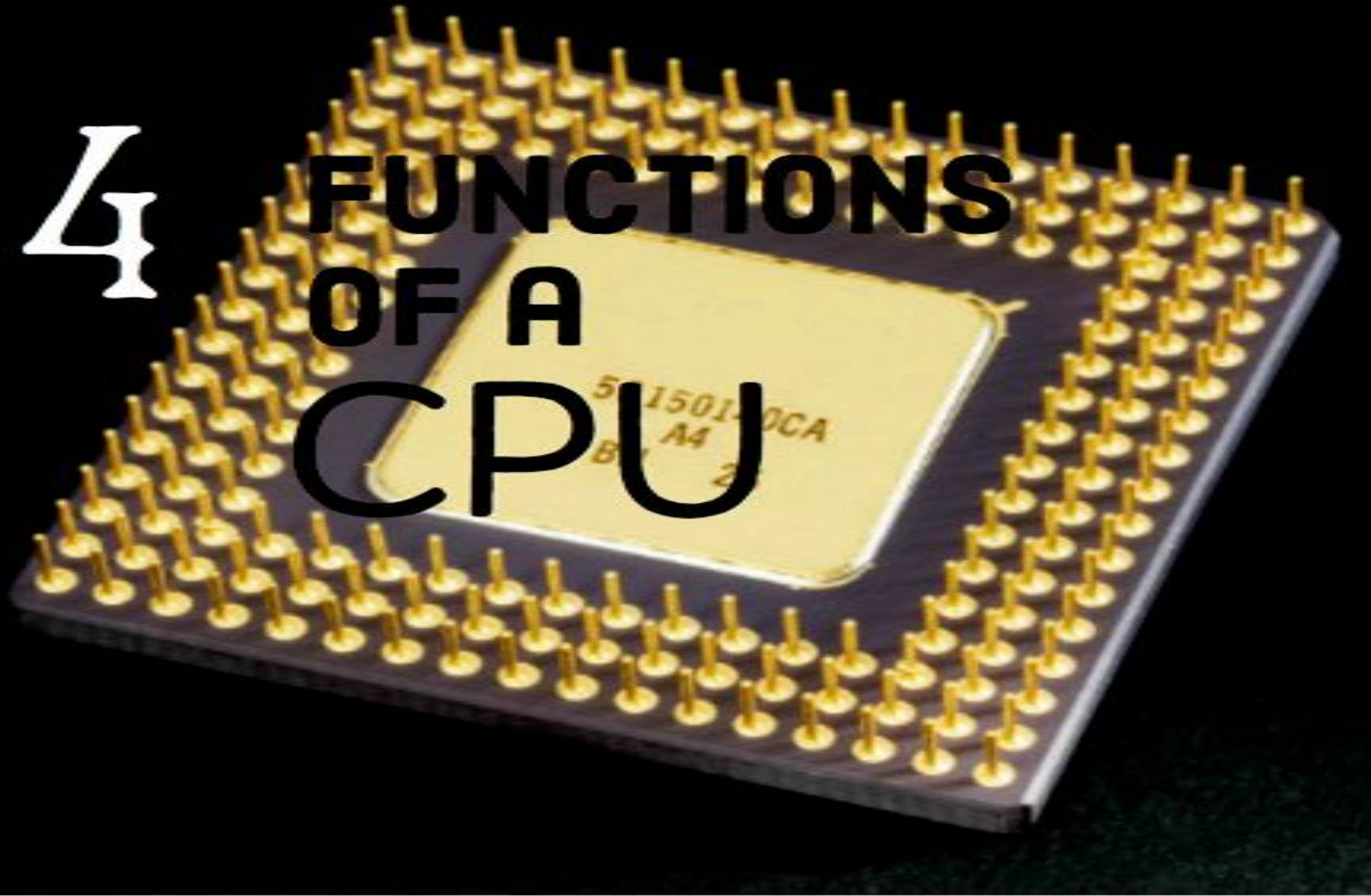




MICRO PROCESSOR

4

FUNCTIONS OF A CPU



FETCH

instructions from
memory

DECODE

into binary
instructions

EXECUTE

action and move
to next step

STORE

write output to
memory



Name	Date	Transistors	Microns	Clock speed	Data width	MIPS
8080	1974	6,000	6	2 MHz	8 bits	0.64
8088	1979	29,000	3	5 MHz	16 bits 8-bit bus	0.33
80286	1982	134,000	1.5	6 MHz	16 bits	1
80386	1985	275,000	1.5	16 MHz	32 bits	5
80486	1989	1,200,000	1	25 MHz	32 bits	20
Pentium	1993	3,100,000	0.8	60 MHz	32 bits 64-bit bus	100
Pentium II	1997	7,500,000	0.35	233 MHz	32 bits 64-bit bus	~300
Pentium III	1999	9,500,000	0.25	450 MHz	32 bits 64-bit bus	~510
Pentium 4	2000	42,000,000	0.18	1.5 GHz	32 bits 64-bit bus	~1,700
Pentium 4 "Prescott"	2004	125,000,000	0.09	3.6 GHz	32 bits 64-bit bus	~7,000

MOORE'S LAW

transistors

10,000,000,000

1,000,000,000

100,000,000

10,000,000

1,000,000

100,000

10,000

1,000

1970

1975

1980

1985

1990

1995

2000

2005

2010

4004

8008

8080

8086

286

Intel 386™ Processor

Intel 486™ Processor

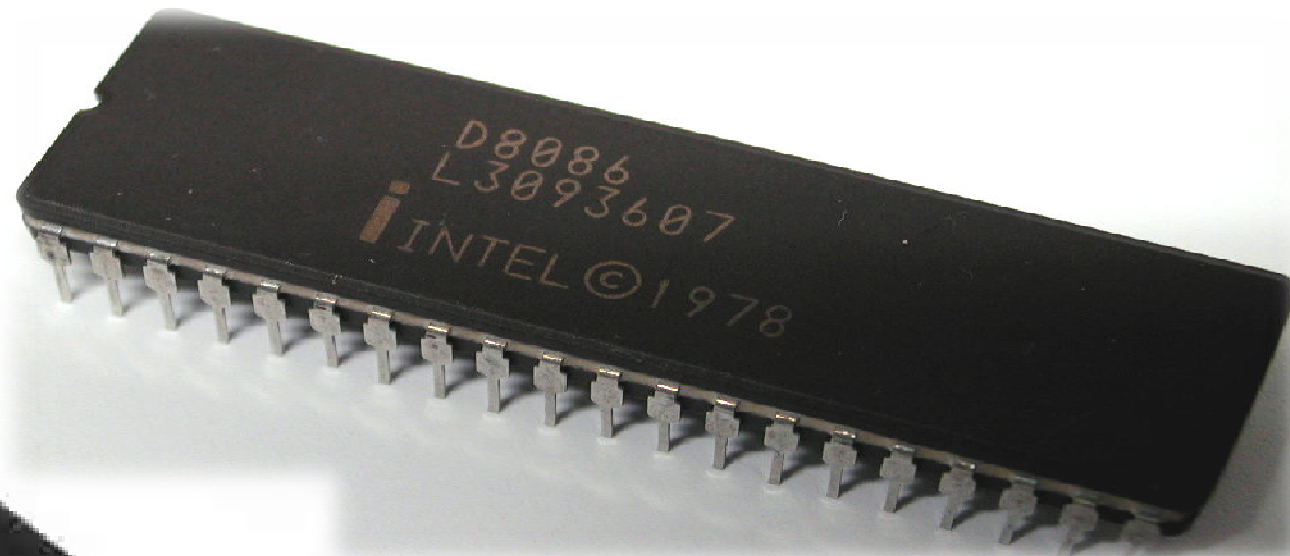
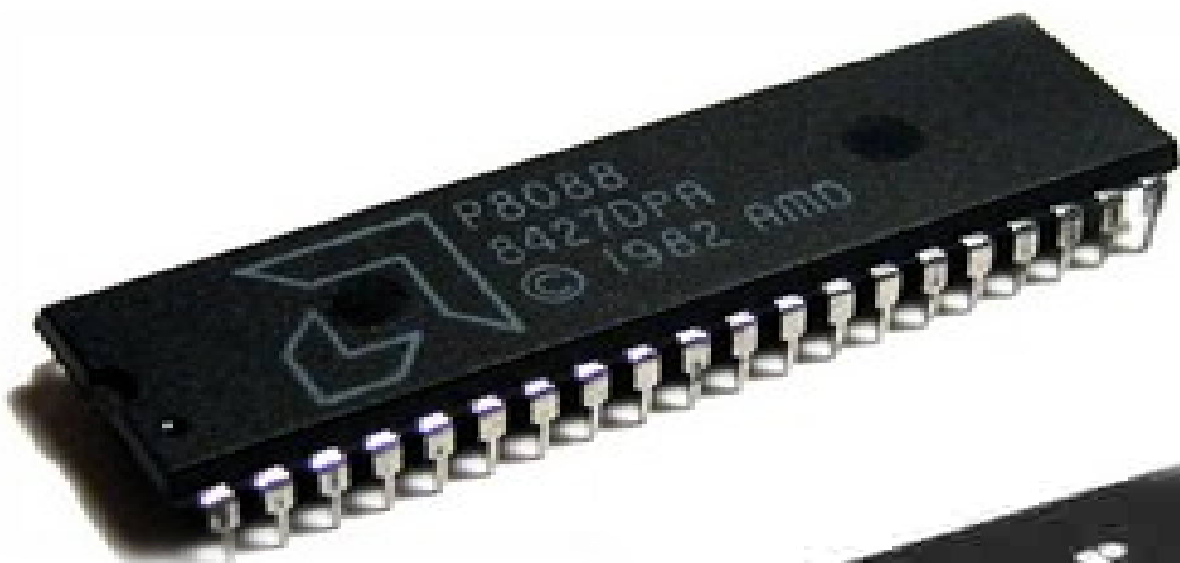
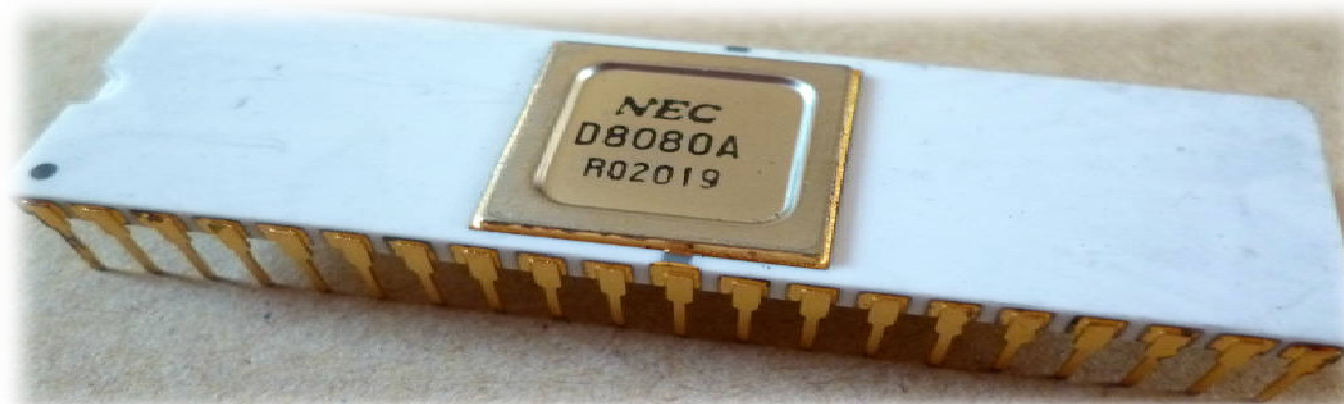
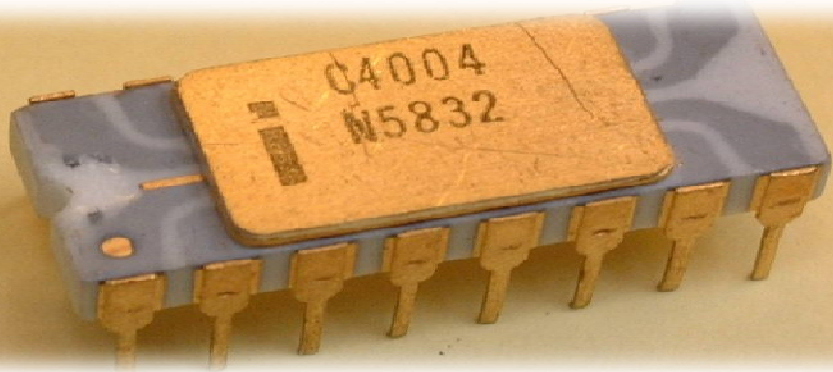
Intel® Pentium® Processor

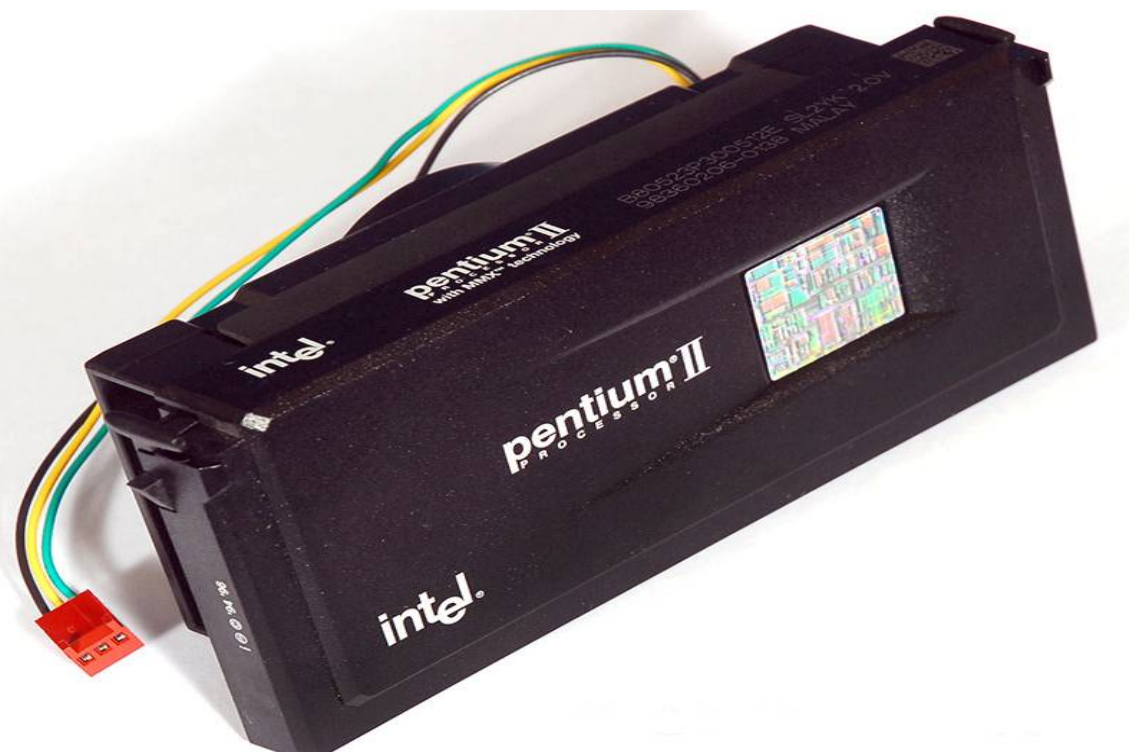
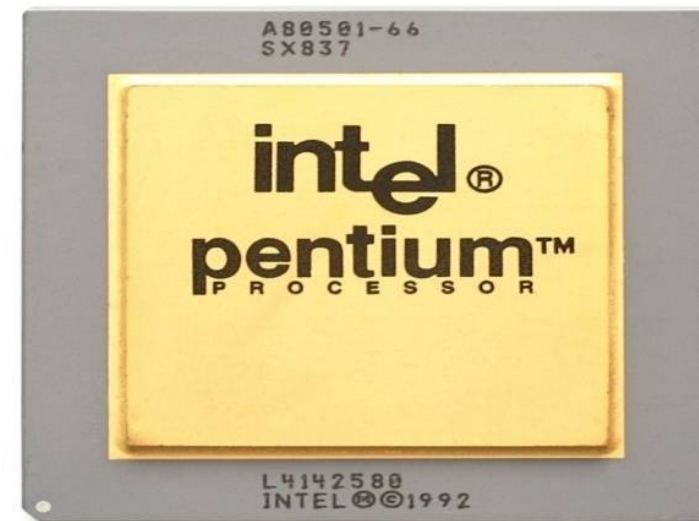
Intel® Pentium® II Processor

Intel® Pentium® III Processor
Intel® Pentium® 4 Processor

Intel® Itanium® Processor
Intel® Itanium® 2 Processor

Dual-Core Intel® Itanium® 2 Processor

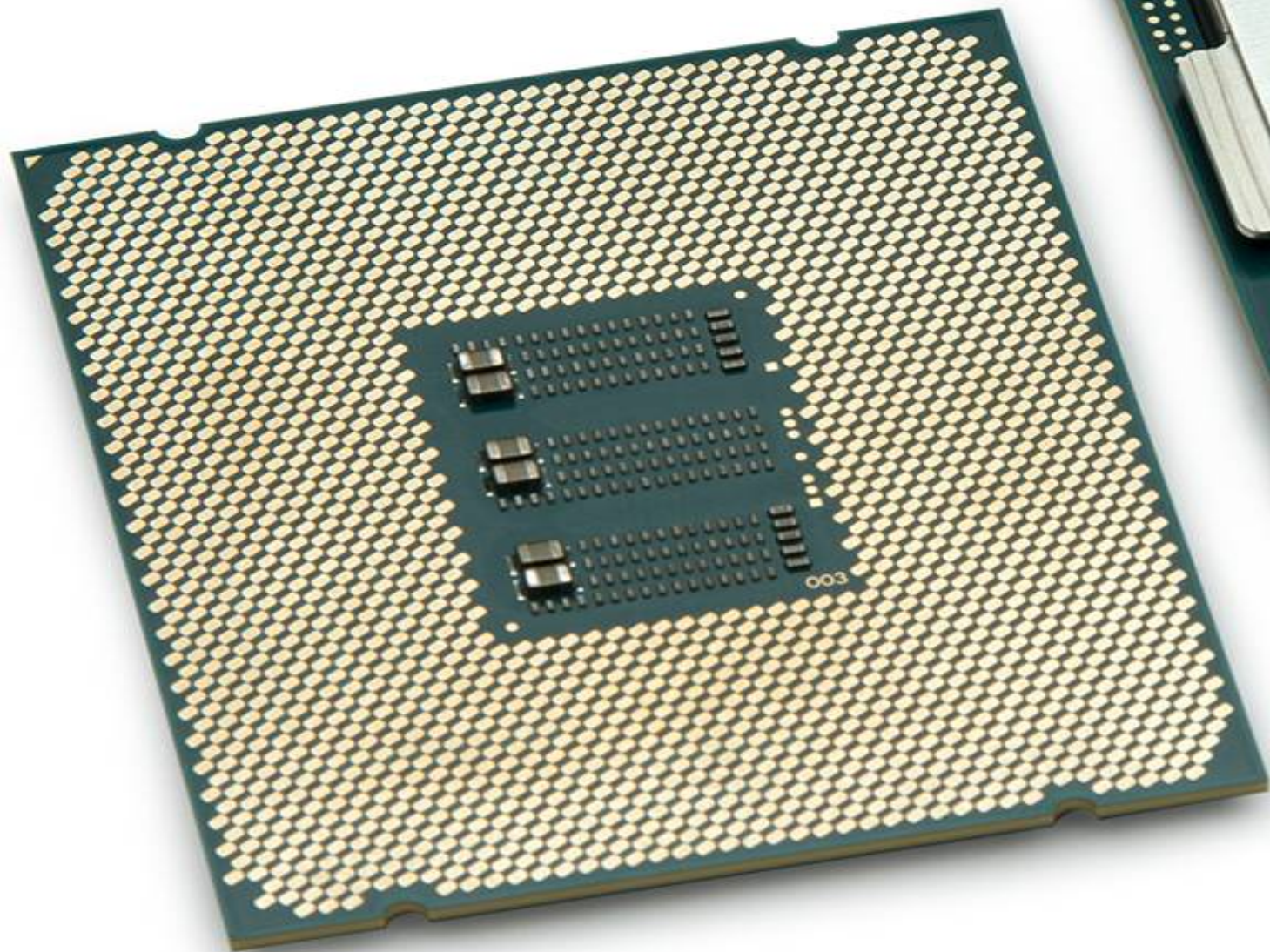




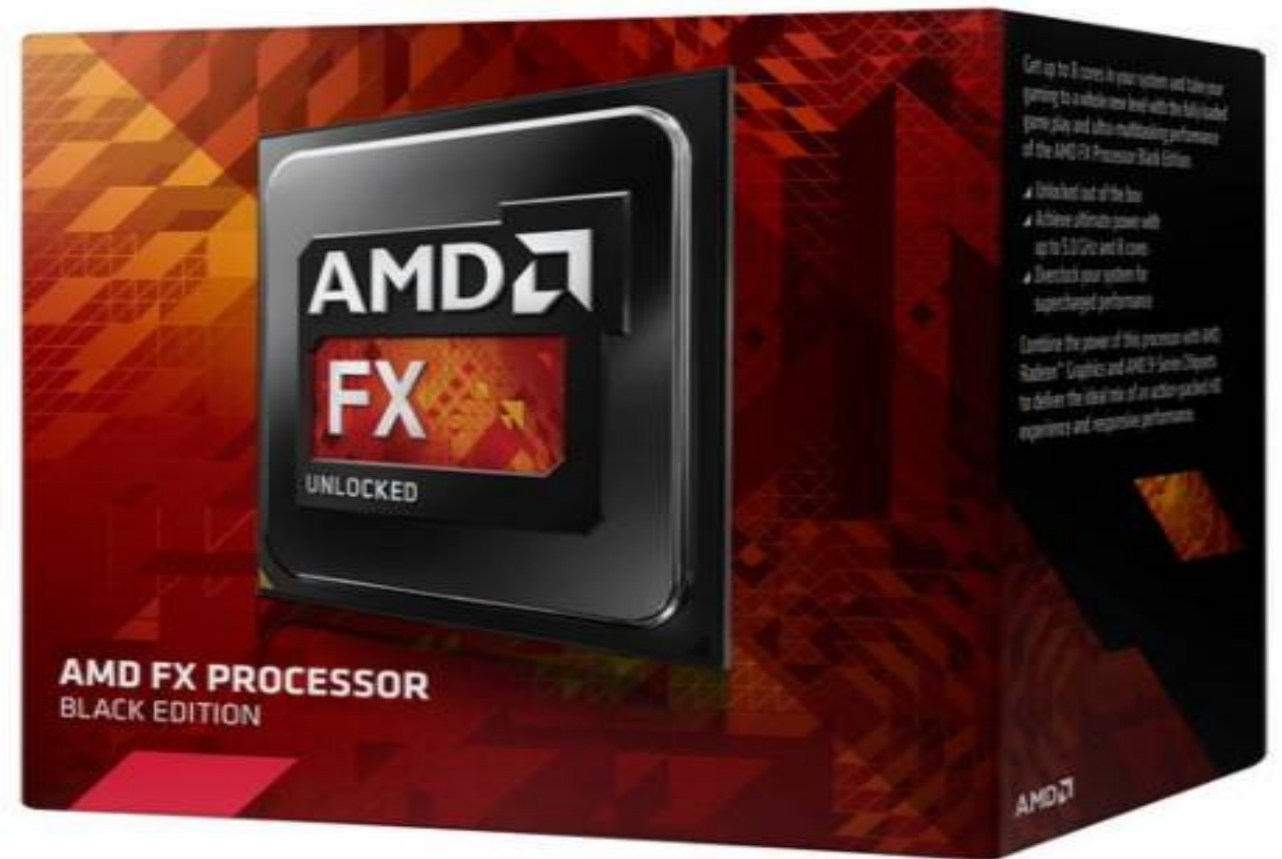




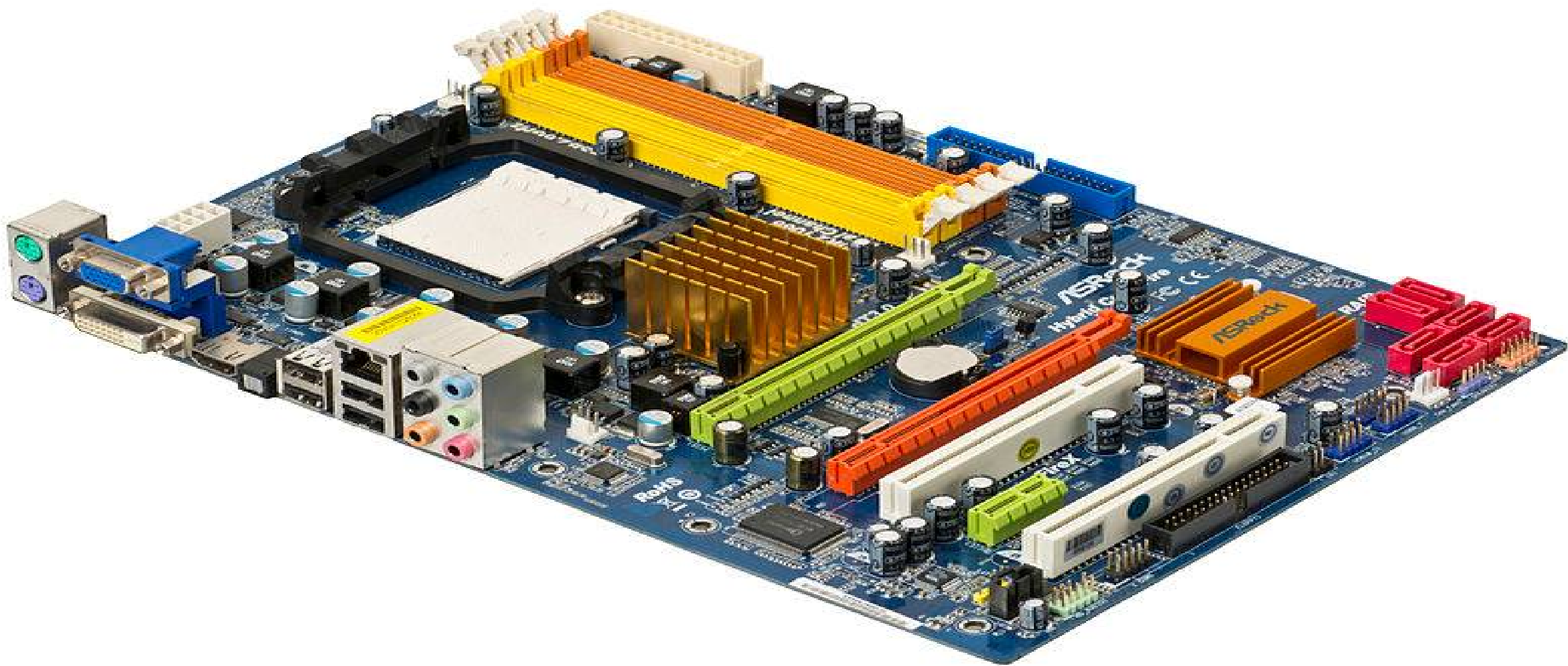








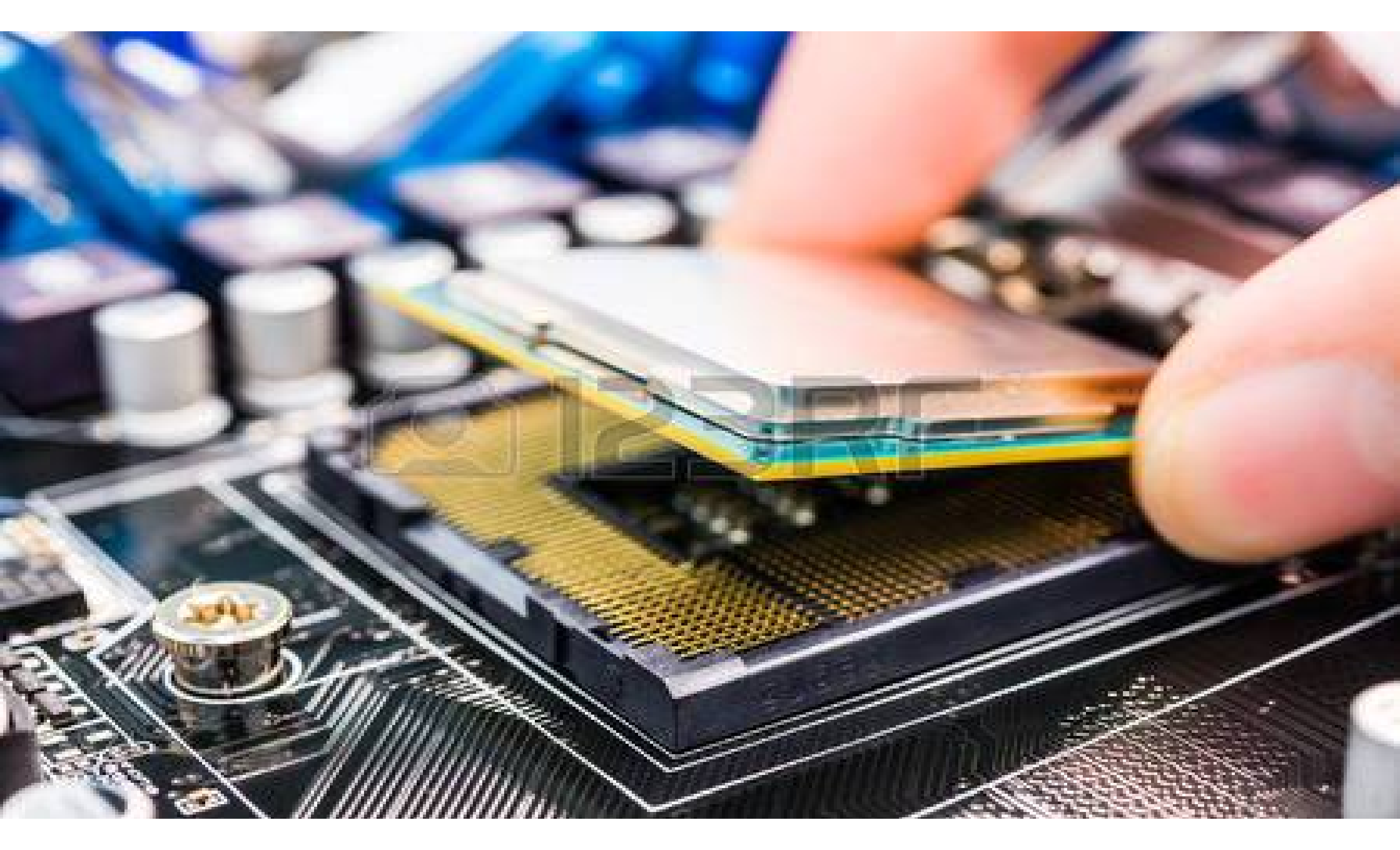


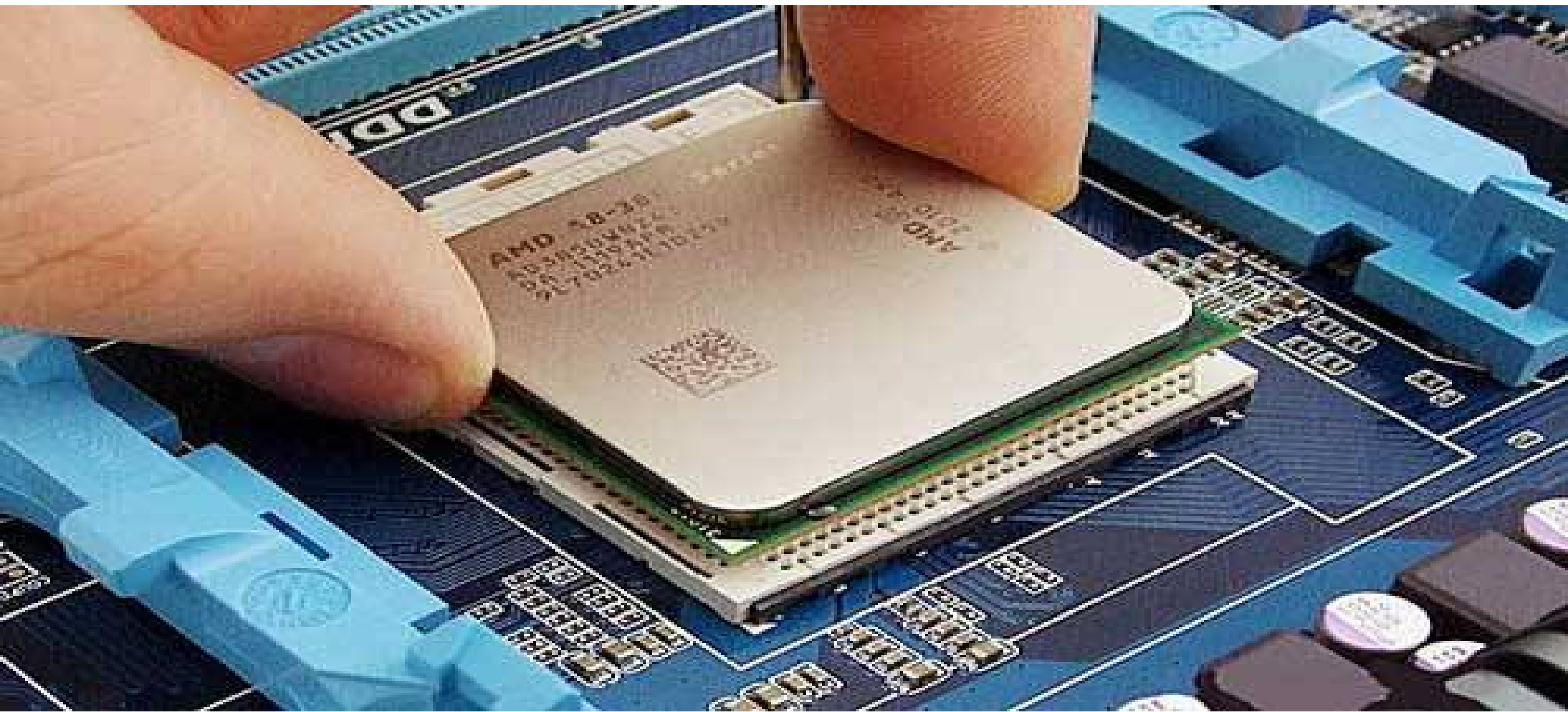


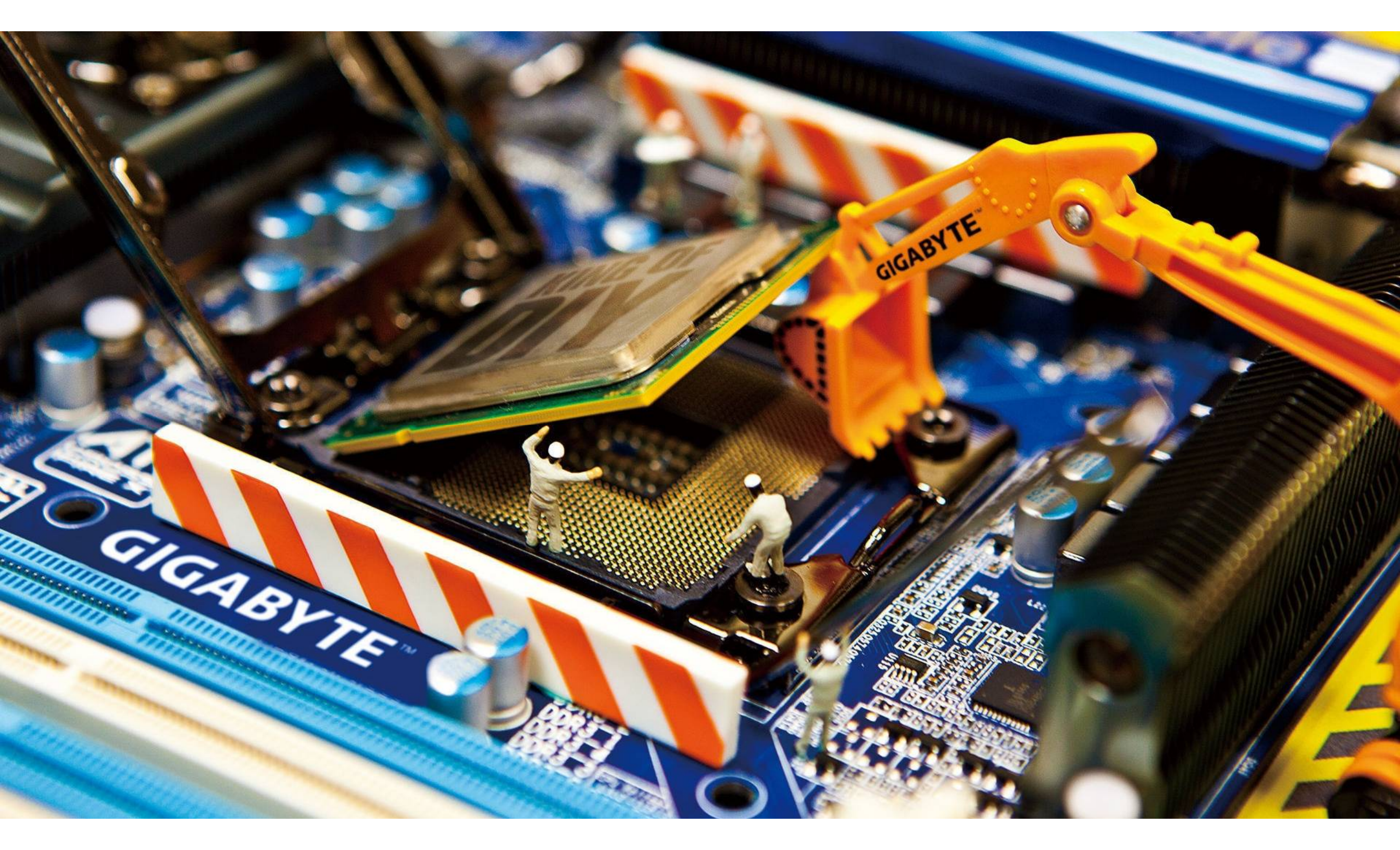




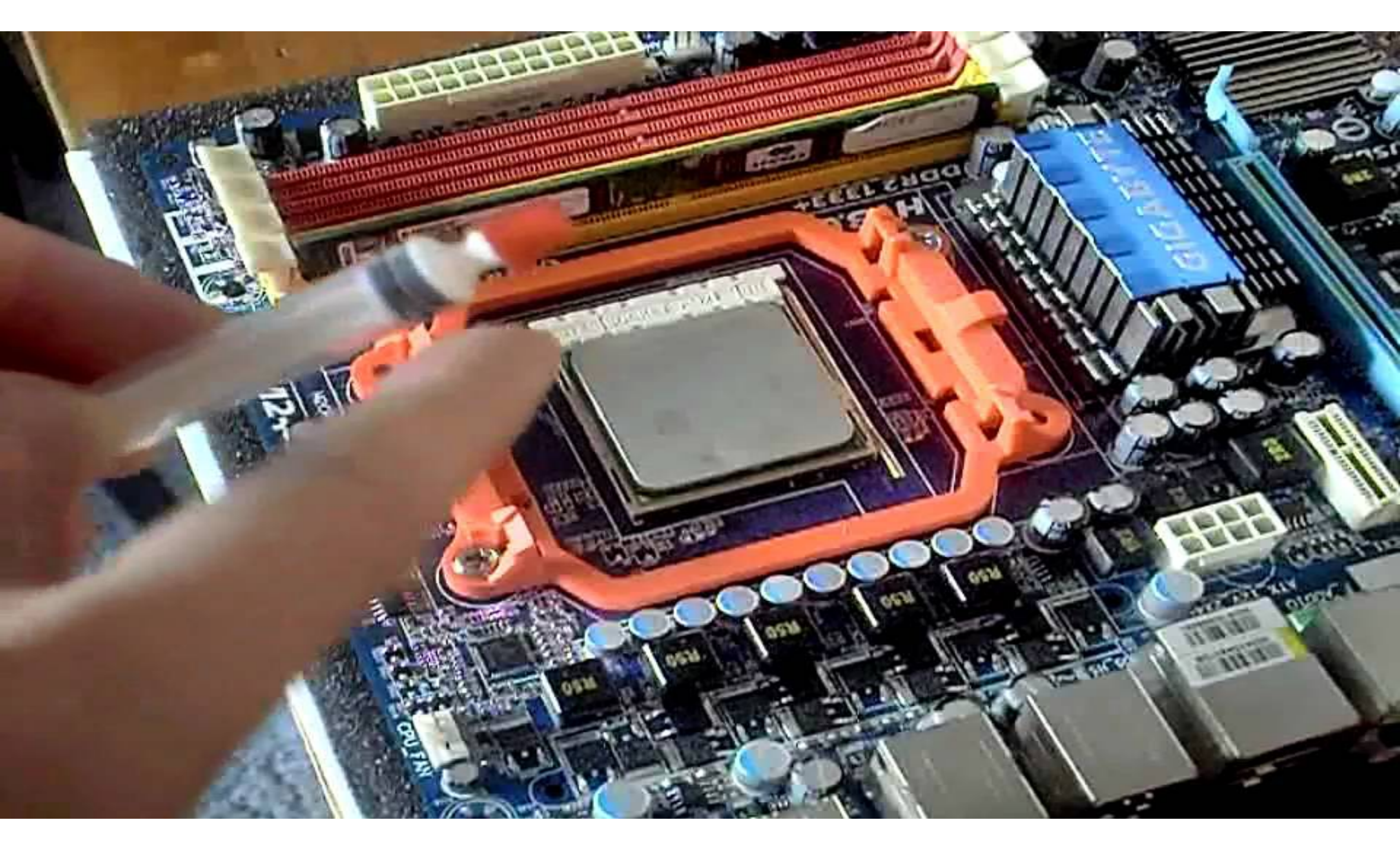








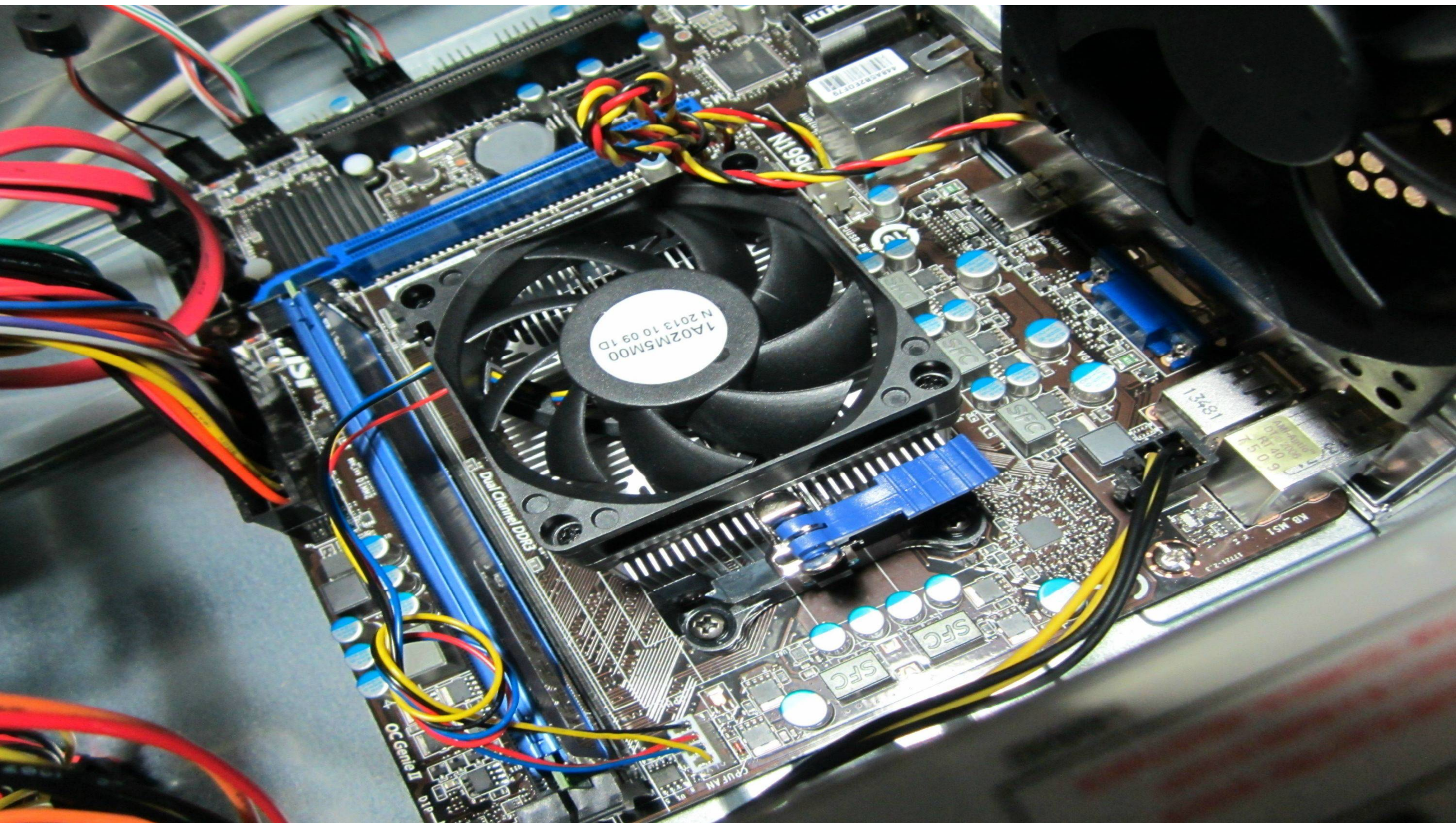


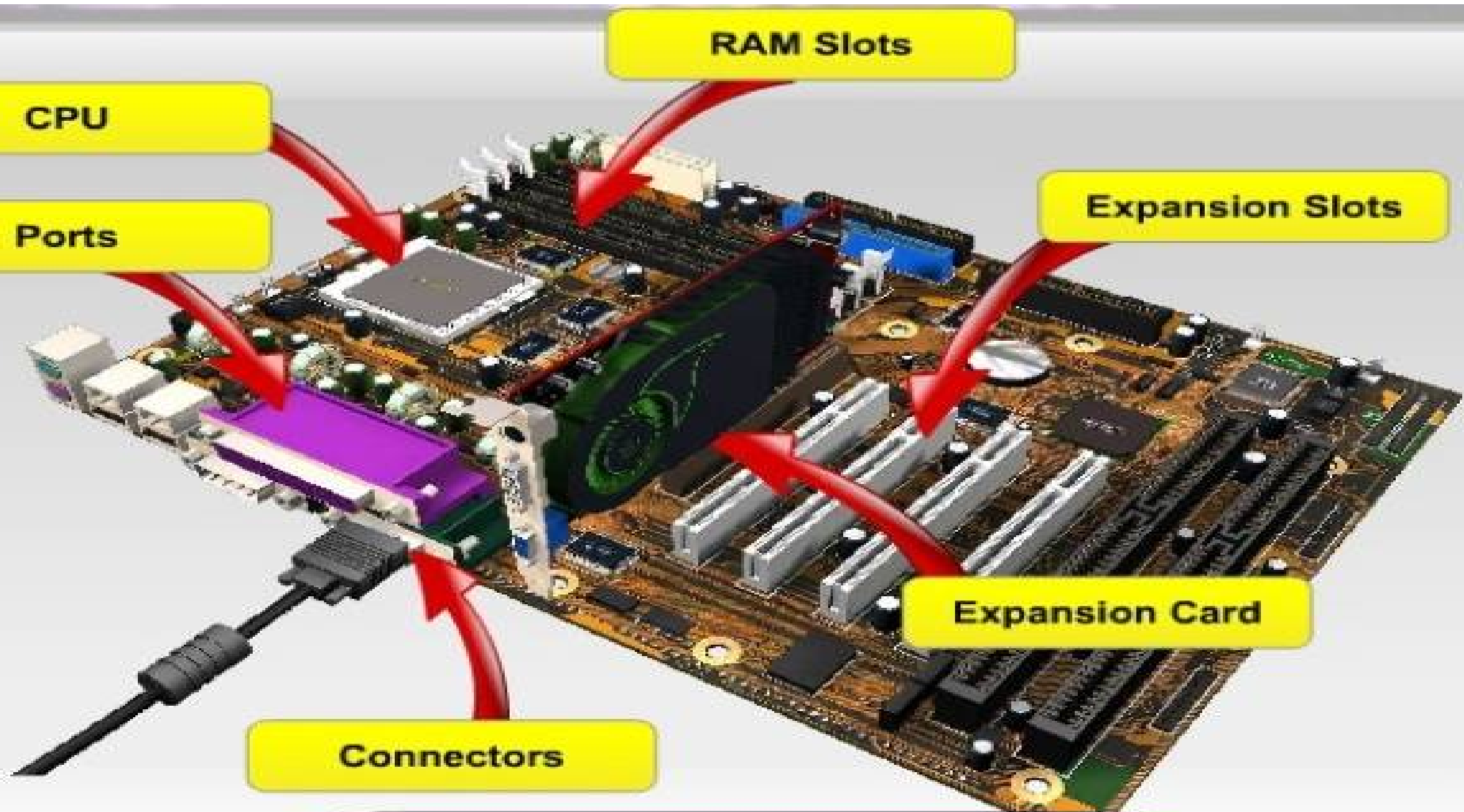








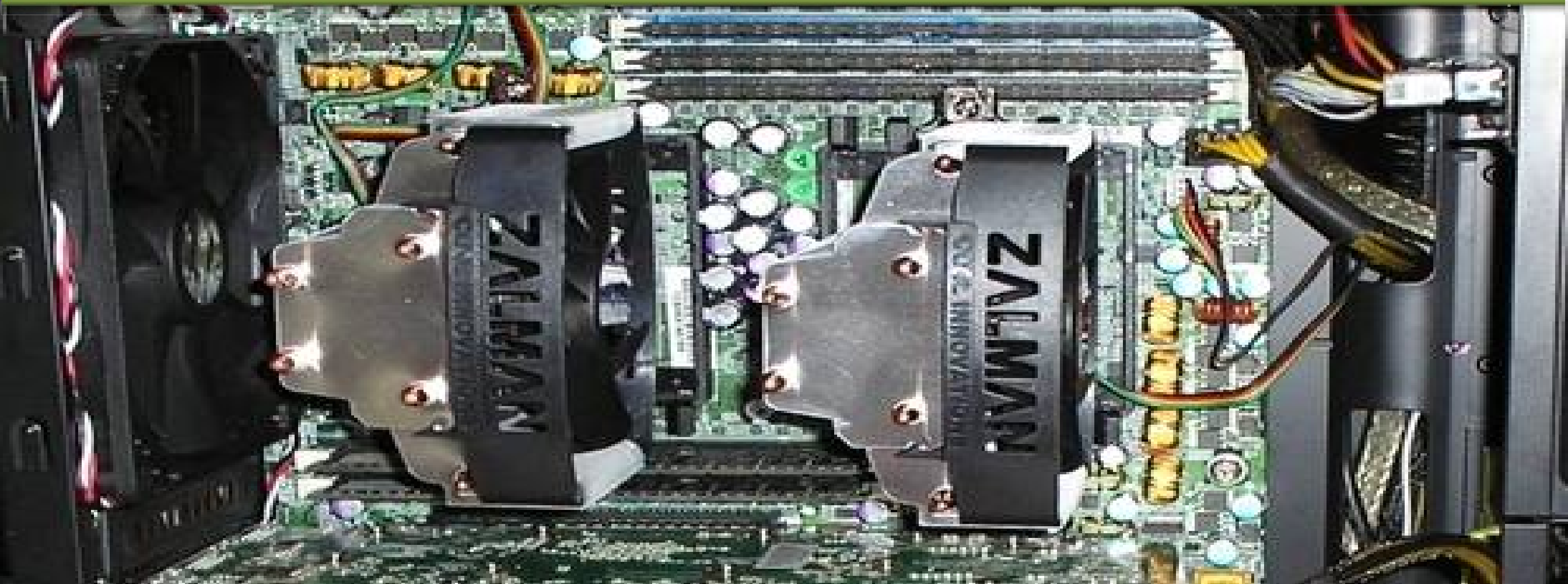




Multi Processing MOTHERBOARD



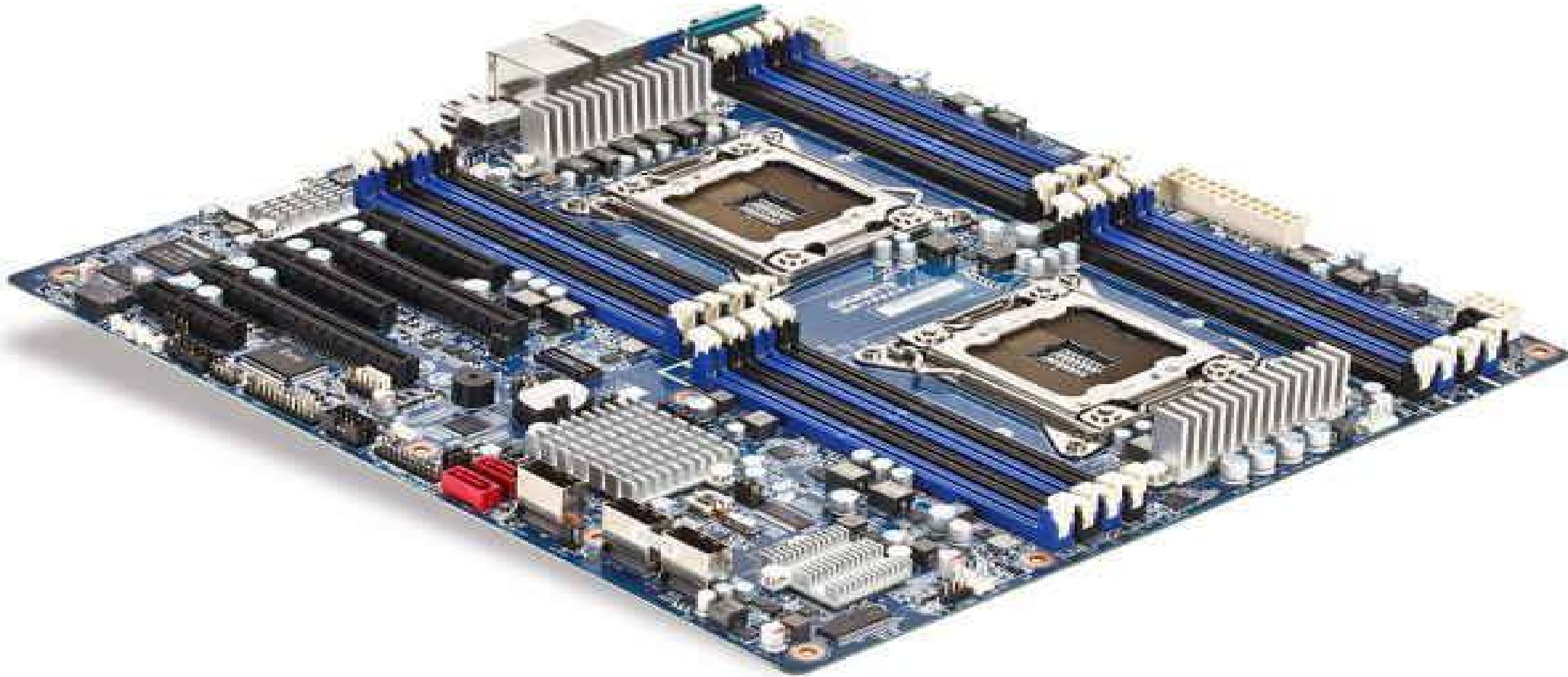
Multi Processing MOTHERBOARD



Multi Processing - MOTHERBOARD



Multi Processing - MOTHERBOARD





Multi Processing - MOTHERBOARD



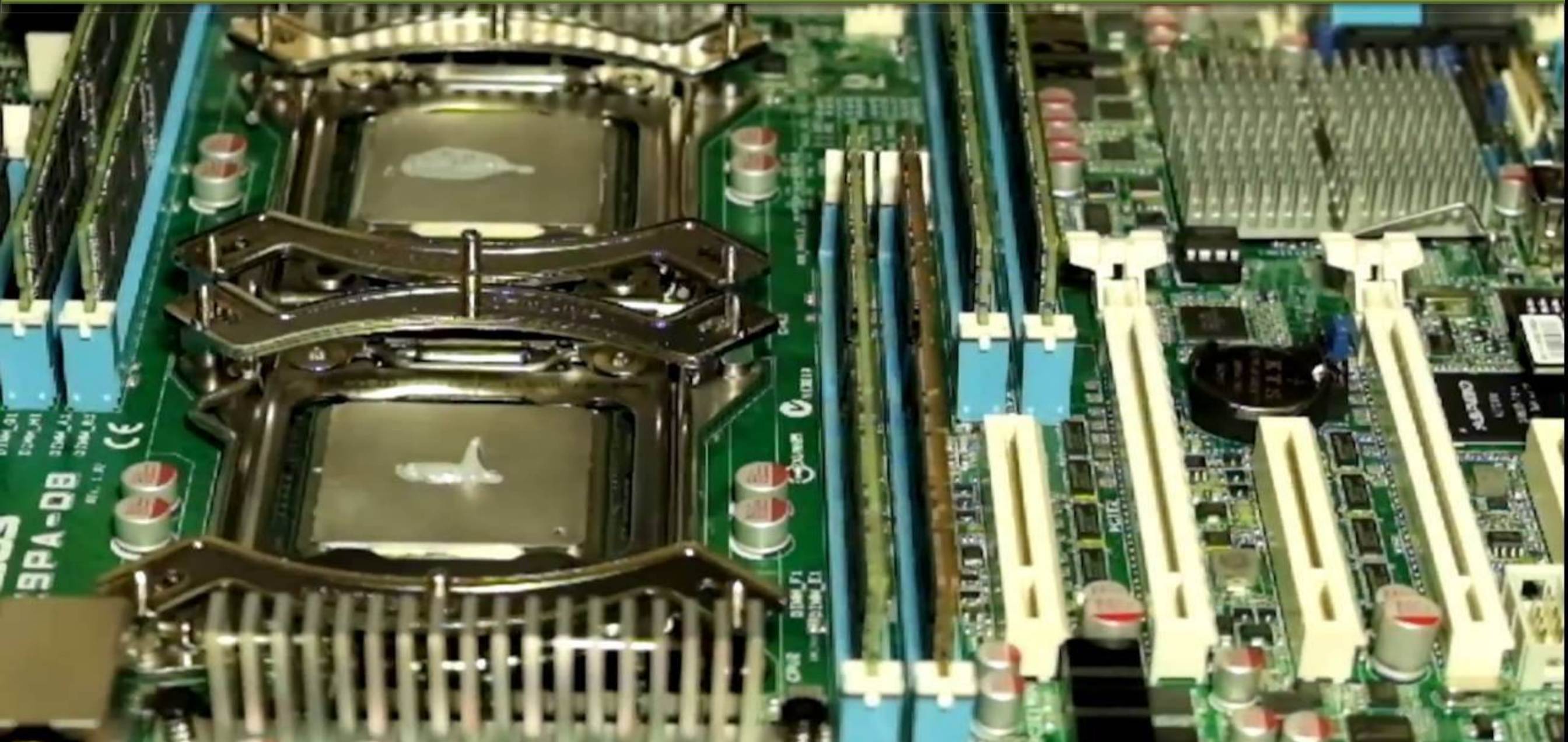
Multi Processing / Parallel Processing Operating System

- Multiprocessing system is a integrated system.
- Two or more CPU is present.
- Simultaneously execute several programs.



Architecture of a computer system showing its CPU, memory & I/O processors

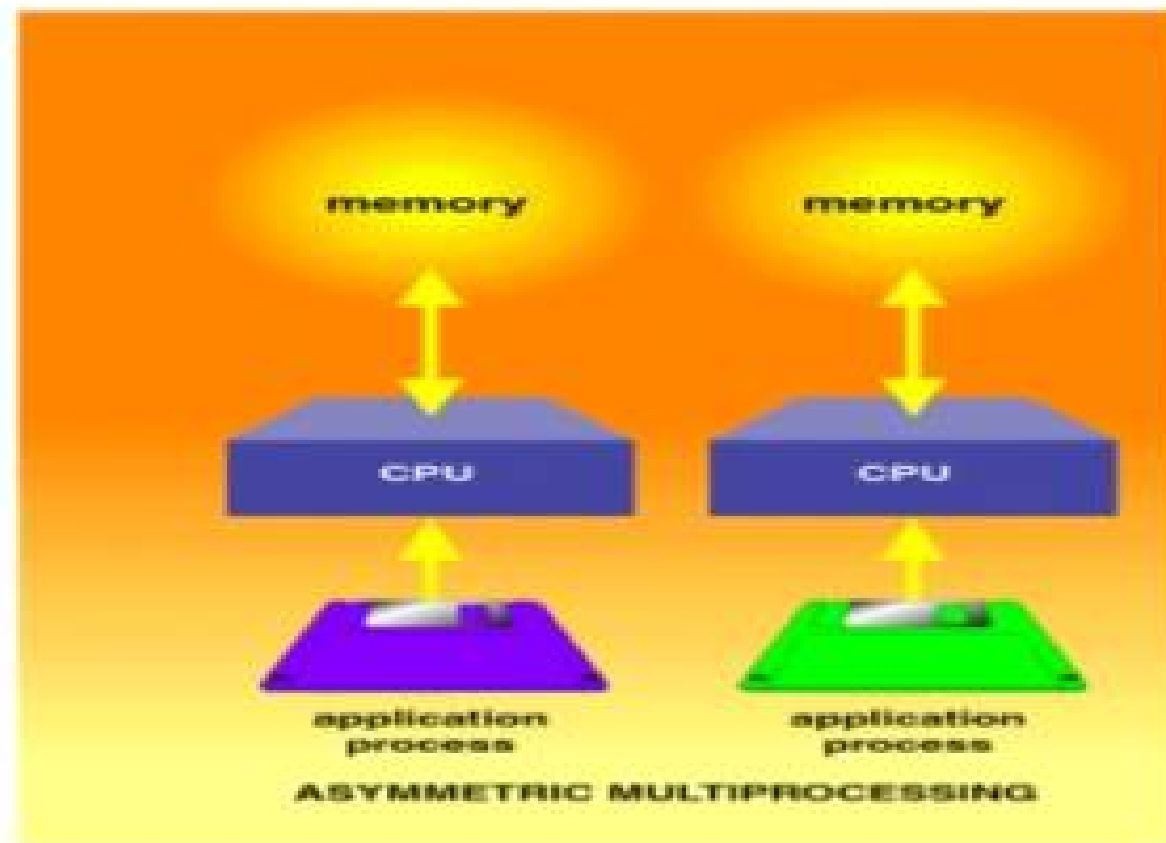
Multi Processing - MOTHERBOARD

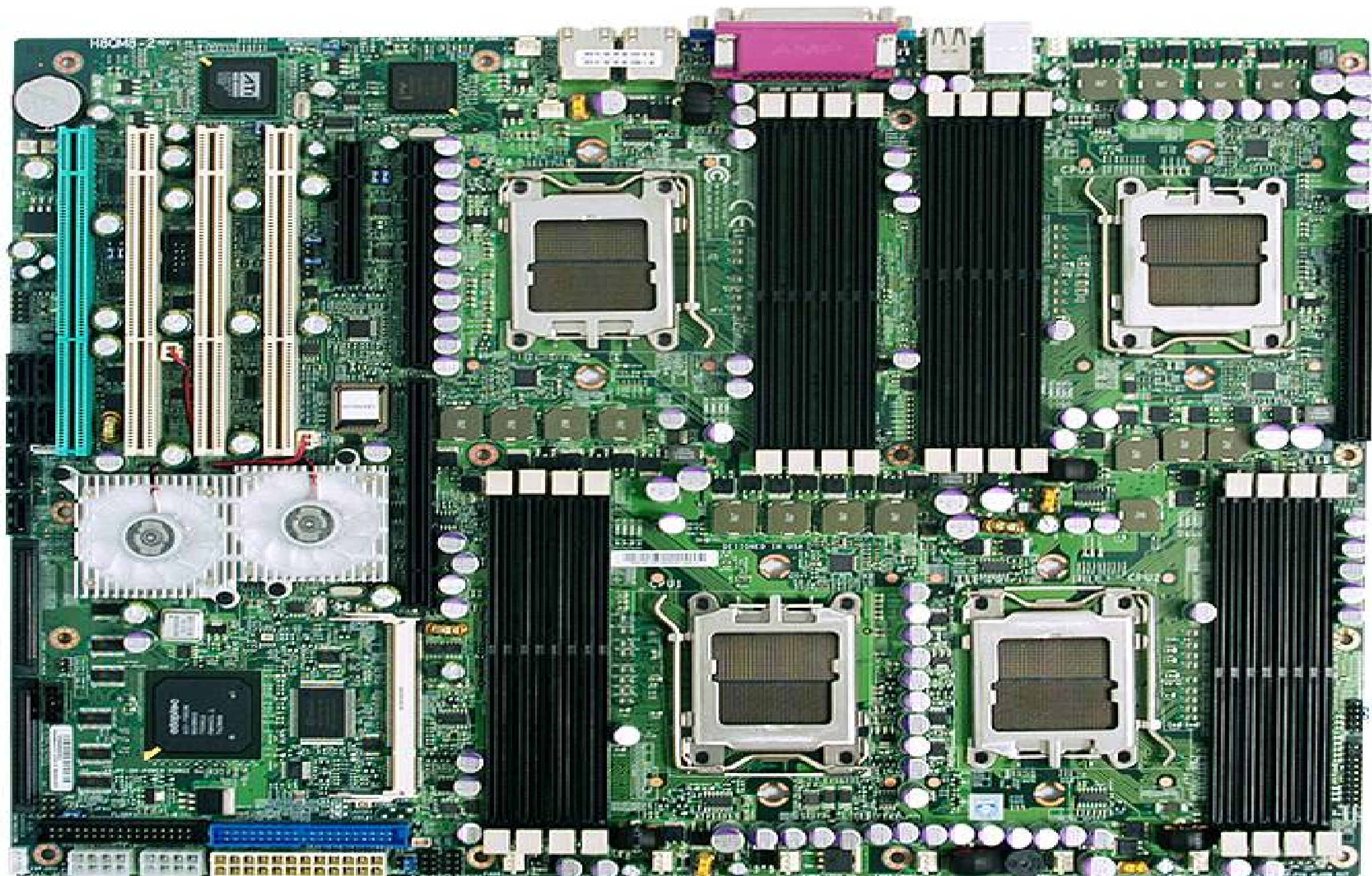


MULTIPROCESSING WITH MULTIPLE CPU'S

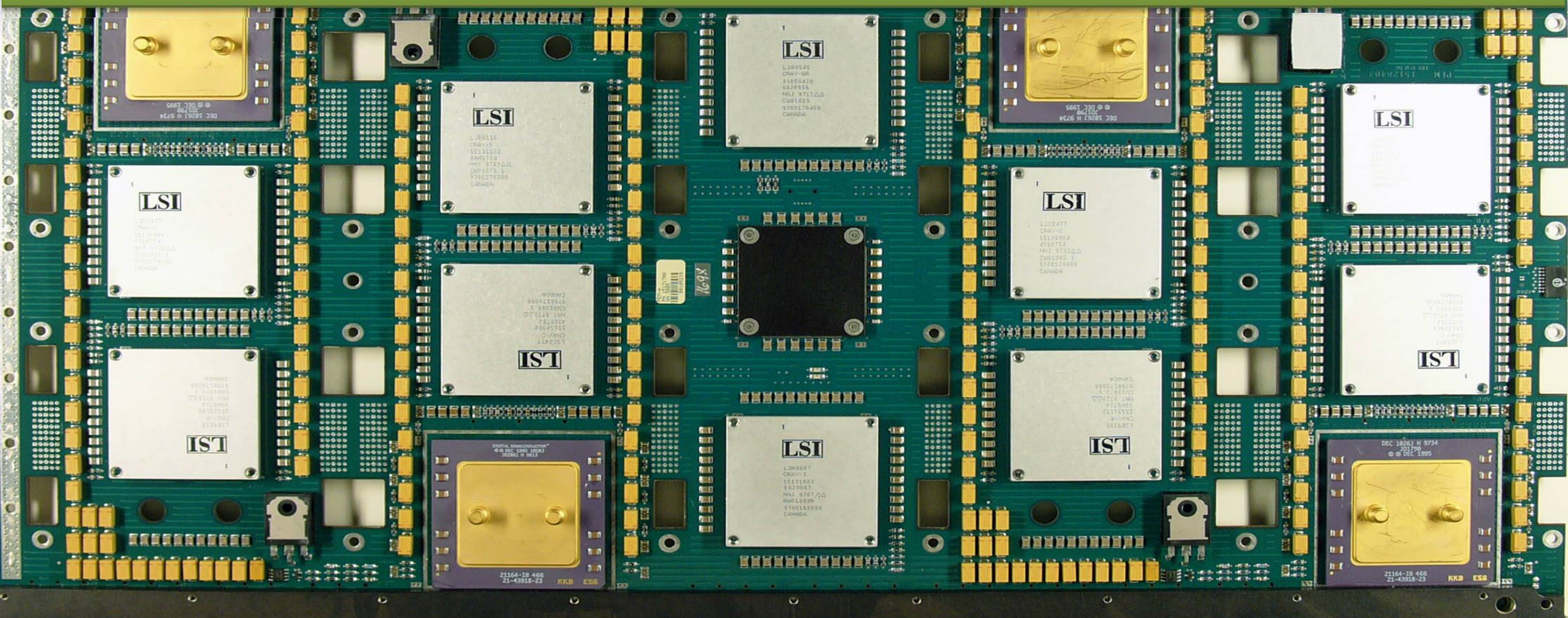
Asymmetric Multiprocessing = Tasks are assigned to a specific CPU and each CPU has its own RAM memory

Symmetric Multiprocessing = Tasks are assigned to any available CPU and CPU's can share RAM memory





Multi Processing MOTHERBOARD



Multi Processing - MOTHERBOARD



CLASSIFICATION OF OS

- **Multi-user:** Allows two or more users to run programs at the same time.
- **Multiprocessing:** Supports running a program on more than one CPU.
- **Multitasking:** Allows more than one program to run concurrently.
- **Multithreading:** Allows different parts of a single program to run concurrently.
- **Real time:** Responds to input instantly. General-purpose operating systems, such as DOS and UNIX, are not real-time.

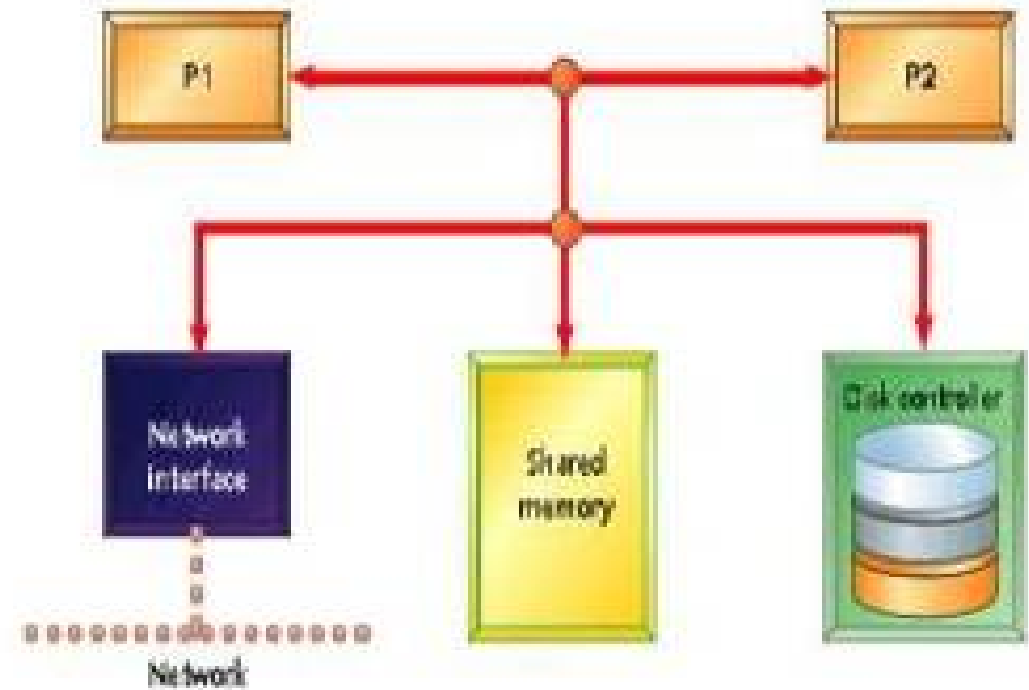


FIG 2: multiprocessing OS

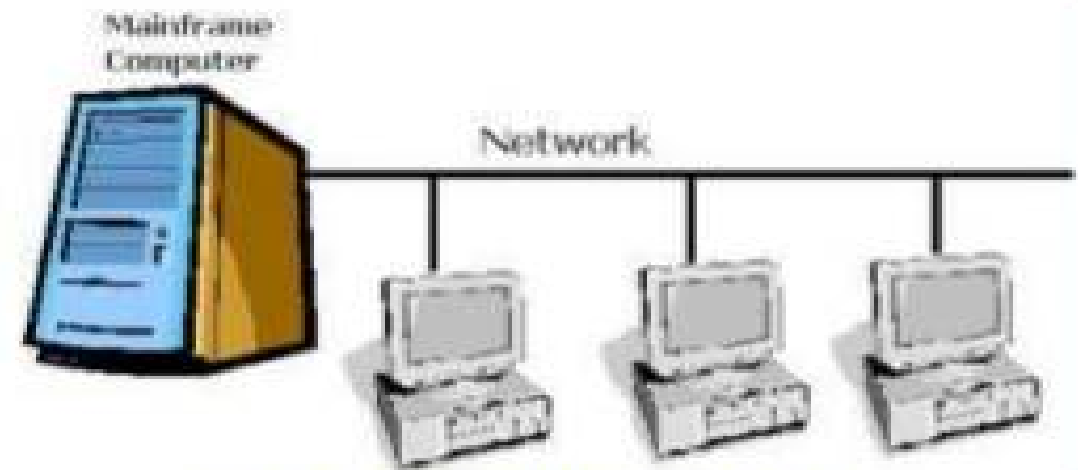
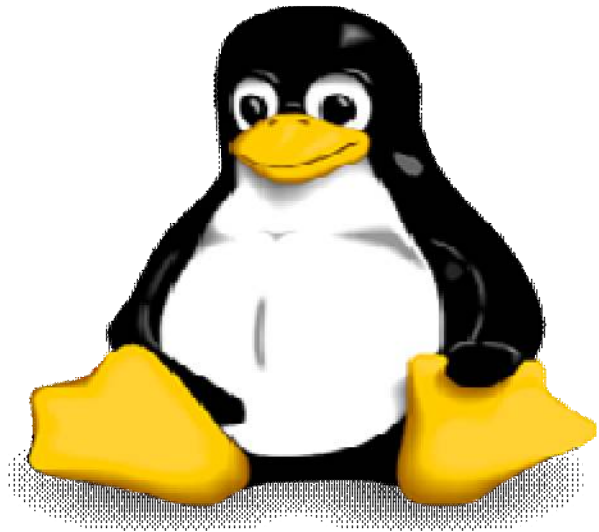


FIG 1: multi-user OS



UNIX

Unix-BCD

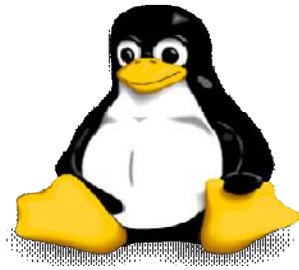


FreeBSD®



☺ nix





UNIX

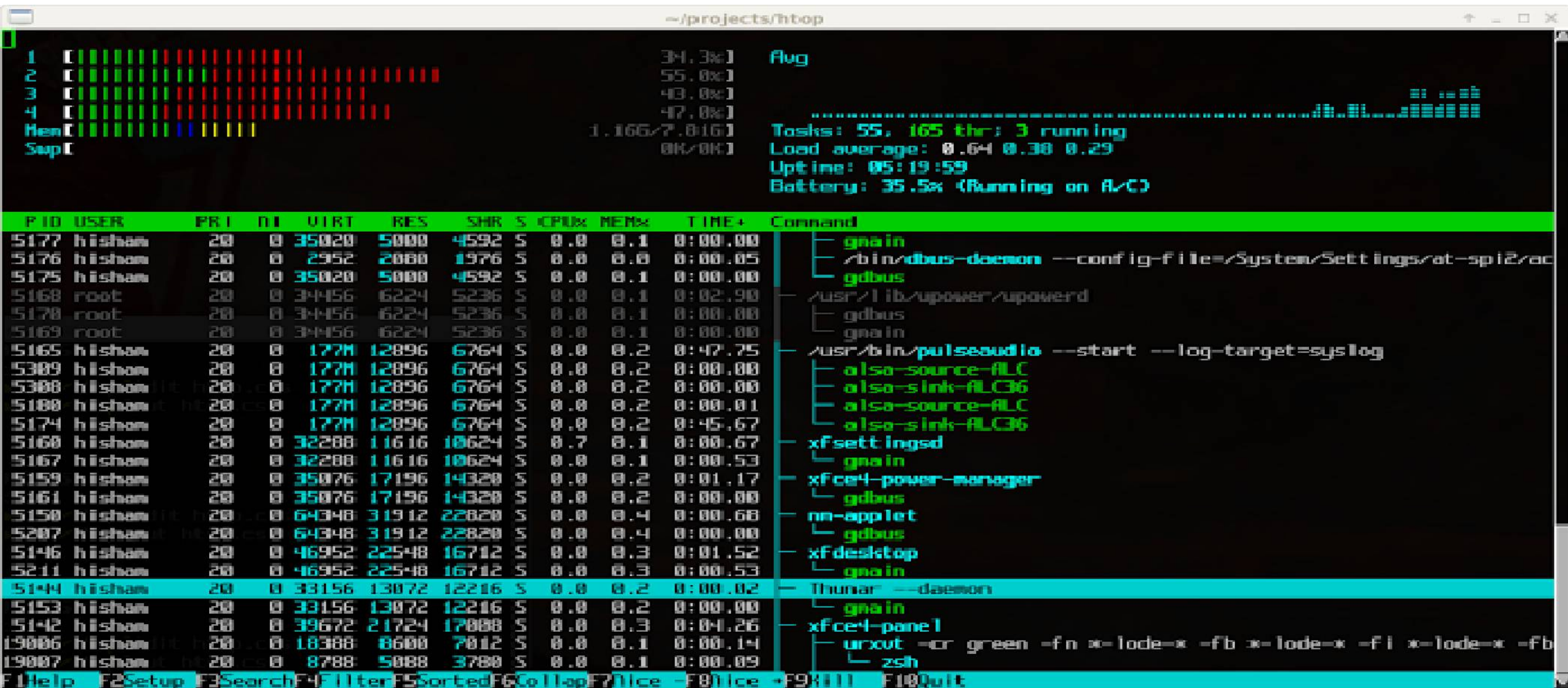
- **Unix** (/ˈjuːnɪks/; trademarked as **UNIX**) is a family of **multitasking, multiuser** computer operating systems that **derive from the original AT&T Unix**, development starting in the 1970s at the Bell Labs research center **by Ken Thompson, Dennis Ritchie, and others.**

(Unix) ;fuD I

- ;g fu 1969&70 e AI & I depkij ;N (Employees) jkjk
oy i ;kx'kkyk e fodf l r vki jfvx f l LVe gA
- ftue du Fkkelu (Ken Thompson) Mfu l fjph (Dennis
Ritchie) Mxy l eDyjk ; (Douglas McElroy) rFkk tk
vk l kuk (Joe Ossanna) 'kkfey FkA
- Ioj rFkk od&LV'ku nkuk e ;fuD l vki jfvx f l LVe
dk ogr mi ;kx gkrk gA
- :fuD l v l Ecvh Hkk"kk e IoiFke fv lkk x:k FkA

(Unix) ;fuD I

```
'replace_interests' => false,  
'send_welcome'      => false,  
});  
  
on_array('error', $result) {  
  $result = array ('response'=>'error', 'message'  
  {  
    $result = array ('response'=>'success');  
  }  
}  
  
send_message($result);
```



neon on #nature (+sent,lag:1) Welcome to #nature I +18 only please & thanks (Kushy) S D F - 1 Bulletin Board
 <nully> Accually in shadowrun it's japan
 <neon> Time for a new desktop. Smile everyone :D [03:11]
 <WD> wj desktop is lame [03:12]
 <neon> shhh, a jpg of 640x480? [03:15]
 <WD> I need to refresh that crap
 <WD> <http://sdf.org/tour/desktops/gen.cgi?m=sdf>
 *** using irc.bepko.de - 2003.0802.1200.org) has changed nick for #nature to nully
 <nully> watch the haters of con. The community has spoke out, randy has asked them to respect his rights to talk to me, nullylogic responds with hate and abuse. [03:20]
 <nully> now the little gang of haters goes into action [03:21]
 <nully> constantly reassuring themselves [03:22]
 <WD> get over it
 <nully> trampling over the rights of other users
 <nully> you'd like me to put up with your hate and fascism wouldn't you? [03:23]
 <nully> that would be very nice for you
 <WD> get over it.
 <nully> for me to roll over and let you bully me
 <WD> Get over it. :P
 <nully> you WISH I would just 'get over it' and let you off the hook
 <WD> No one is persecuting you but yourself
 [03:24]

---UU:Q**--F2 #nature@SDF Bot L701 (ERC)-----
 neon on #helpdesk (+sent,lag:1) Welcome to #helpdesk I Questions? This is the place
 *** using irc.bepko.de - 2003.0802.1200.org) has joined channel #helpdesk [03:25]
 *** using irc.bepko.de - 2003.0802.1200.org) has quit: Quit: kroll 03:26-2,2 -- New
 we there yet? [03:28]
 *** using irc.bepko.de - 2003.0802.1200.org) has quit: Quit: leaving [03:35]
 *** using irc.bepko.de - 2003.0802.1200.org) has quit: Ping timed out
 *** using irc.bepko.de - 2003.0802.1200.org) has joined channel #helpdesk
 *** using irc.bepko.de - 2003.0802.1200.org) has joined channel #helpdesk [03:01]
 <Kushy> flie: Welcome to irc.sdf.org! I'm Kushy the friendly local KSH bot, please be nice to me as I am semi-sentient.
 <Kushy> Type /help for IRC commands. ARPA membership required for external server access.
 <Kushy> Type ?triggers and ?help for additional help and information.
 <nully> flie: Hello, welcome to sdf :) [03:09]
 <WD> be careful now.. :P [03:12]
 [03:24]

---UU:Q**--F2 #helpdesk@SDF Bot L281 (ERC)-----
 Text is read-only
 [0] 0:hash 1:hash
 [0] 0:root 1:ewacs 2:sdf 3:sleep 4:bash

S D F - 1 Bulletin Board
 =====
 BBOARD POSTS TOPIC
 =====
 MINECRAFT [0052] No Description
 ARPA [0114] ARPA members helping ARPA members
 DIASPORA [0008] No Description
 RETRO [0045] Bone knives and bear skins
 RADIO [0001] No Description
 OCCUPRINT [0004] No Description
 MOIP [0102] No Description
 UTILITY [0001] No Description
 HELPDISK [0554] Users Helping Users
 ANONYMOUS [0154] Anonymous people talking about strange things, anonymously
 BITCH [0072] a bitch board for airing the grievances of everyday life.
 JOBS [0004] No Description
 URATO [0008] No Description
 MEETUP [0008] SDF IRL meetups
 PHILOSOPHY [0003] No Description
 IMAPC [0007] No Description
 SDFEU [0050] SDF-EU User discussions
 CODING [0047] Programming computers
 GENERAL [0358] Random Discussions, News and Thoughts
 ANNOUNCE [0062] System Announcements and News
 REQUESTS [0413] Software Updates and Installs for SDF and SDF-EU
 MUSIC [0024] Bands, Songs, Gigs, Instruments and more
 [<RETURN> or <Q>UIT]

---UU:Q**--F2 #terminal Bot L134 (Term: char run)-----
 Guidelines:
 The image must be locally hosted (in your local webspace)
 The image you want to display MUST be a JPG of 640x480 pixels
 Would you like to begin? (y/n) y
 YES
 DESKSHOTS Version 1
 [a] ADD (or modify) your DESKTOP
 [r] REMOVE your DESKTOP
 [q] QUIT
 Choice? a
 ADD
 Please answer the following the best you can
 Local URL for 640x480 pixel JPG image is at
 [none] http:// * ls
 Mail News bin html tar top
 * * cd html/
 */html * ls
 cgreek-beta.el ewacs.html index.html screenshot_640x480.jpg unvot.png
 desktop.jpg ewacs.org index.org scrot-sdfeu.png
 */html * rm desktop.png
 */html *

---UU:Q**--F2 #shell Bot L142 (EShell)-----

```

11
12 #include <stdlib.h>
13 #include <stdio.h>
14 #include <stdarg.h>
15 #include <string.h>
16 #include <sys/types.h>
17 #include <sys/ipc.h>
18 #include <sys/shm.h>
19
20 #include "dbg.h"
21
22 /**
23  * WARNING: This program has incomplete error handling!!!
24  */
25
26 #define SHM_SIZE 1024 /* make it a 1K shared memory segment */
27
28 int main(int argc, char *argv[])
29 {
30     key_t key;
31     int shmid;
32     char *data;
33     int mode;
34     if (argc > 2) {
35         fprintf(stderr, "usage: shmdemo [data_to_write]\n");
36         exit(1);
37     }
38     /* make the key: */
39     key = ftok("config.h", 'R');
40     check(key != -1, "ftok() failed");
41
42     /* connect to (and possibly create) the segment: */
43     shmid = shmget(key, SHM_SIZE, 0644 | IPC_CREAT);

```

```

top - 15:42:09 up 1:17, 1 user, load average: 0.21, 0.21, 0.22
Tasks: 133 total, 1 running, 132 sleeping, 0 stopped, 0 zomb
%Cpu0 :  2.7/0.0  3[
%Cpu1 :  8.6/0.0  9[
%Cpu2 :  2.0/0.7  3[
%Cpu3 :  3.4/0.7  4[
GiB Mem : 18.3/7.530
GiB Swap : 0.0/2.000

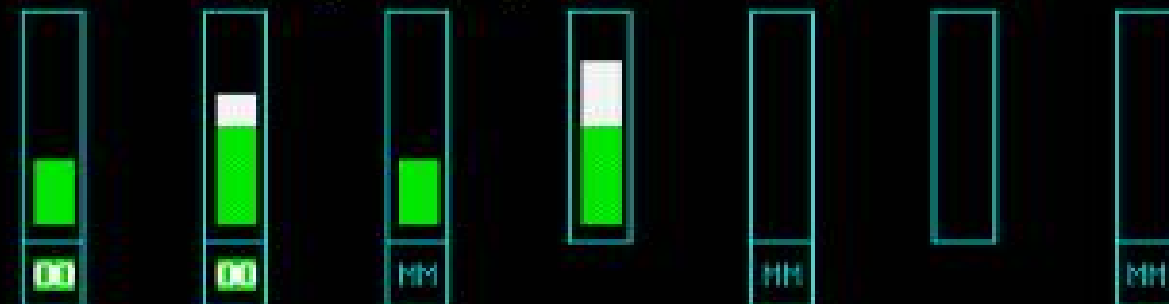
```

PID	USER	PR	NI	VIRT	RES	%CPU	%MEM	TIME+	S
1	root	20	0	113.4m	4.5m	0.0	0.1	0:00.56	S
147	root	20	0	132.2m	50.4m	0.0	0.7	0:00.23	S
162	root	20	0	34.0m	3.3m	0.0	0.0	0:00.51	S
245	root	20	0	16.0m	2.5m	0.0	0.0	0:00.05	S
264	root	20	0	4.3m	1.8m	0.0	0.0	0:00.78	S
268	root	20	0	14.8m	2.4m	0.0	0.0	0:00.01	S
269	dbus	20	0	30.4m	3.0m	0.0	0.0	0:00.02	S
289	root	20	0	69.0m	3.3m	0.0	0.0	0:00.03	S

AlsaMixer v1.0.28

Card: **HDA Intel PCH**
 Chip: **Realtek ALC3239**
 View: **Playback**
 Item: **Master [dB gain: -27.00]**

F1: Help
 F2: System information
 F6: Select sound card
 Esc: Exit



The background is a dark, monochromatic composition. It features a series of thin, light-gray lines that flow from the left and right sides towards the center, creating a sense of depth and movement. These lines are arranged in a way that suggests a three-dimensional space, with some lines appearing to recede into the distance. In the lower-left and lower-right corners, there are subtle grid patterns that blend into the flowing lines. The overall effect is a sophisticated, technical, and futuristic aesthetic.

LINUX



Linux



Home



Trash



File System



Vector-Docs



Help forum



Vector-Tutor...





Buscar aplicaciones

Filtrar resultados ▶

Usadas recientemente



Ayuda



Cliente de correo
Thunderbird



Videos



Editor de textos



Calculadora



Reproductor de
música Rhythmbox

Instaladas Ver 77 resultados más ▶



Acceso universal



Actualización de
software



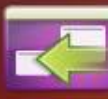
Amazon



Analizador de uso de
disco



Apariencia



Aplicaciones al inicio

Más sugerencias Ver 16 resultados más ▶



US\$ 0.00

Draw Me A Path



US\$ 0.00

Blobs



US\$ 0.00

Minefield



US\$ 6.99

Linux Format
... - 50 distros: tested!



US\$ 39.99

RaySupreme



US\$ 2.99

Peg Solitaire



Gimp

2 X

```

@i@ SignOff Forex: #lunar [Connection reset]
<csim> i have taken a first cut at a Lunar Line
<hardkrash> coolness
<hardkrash> pict?
<csim> no pic yet...
@i@ You have new email.
<hardkrash> ok cool post the screen shot to tl
<nhudson> csm: can I ask you something?
<csim> wgat
<csim> what?
<nhudson> can I put my gnome2 modules into the
to work on them?
<csim> scratch pad is brutus!
<hirisov> csm did you see my last question abo
help me with it, please?
<nhudson> cool
<nhudson> ill put it there then
<csim> hirisov... wait... i am doing something
<hirisov> okay sorry
<hirisov> just wasn't sure you were here then
@i@ scarecrow [scarecrow@12-229-245-33.client
@i@ mode/#lunar [+o scarecrow] by ChanServ
[04:37pm][csim(+eiw)][Mail: 101] [#lunar(+nt)]
[lag 0] [0/2 N/13 I/O V/O F/O]
[#lunar]

```

```
BUILD
Bzflag-config
capture-1021425237.xwd
capture.xwd
cdrwnotes
cdrwnotes~
Clipboard/
clipboard
csm.gnumeric
current
cvs2cl.pl
cvsbook.html
Desktop/
DETAILS*
dlog/
diary
docs/
emacs/
error-log
eth0
eth1
evolution/
export-sorcery*
files/
franklin
fstab
fsatool/
galeon-crash.output
gLSB.html
gnome-pilot-conduits-0.8/
GNOMEstep/
graphics/
GTKRC
htmltool/
[csm@stealth:~]->
```

```

ircLog
irc-notes
ircprimer.html
iso_build.log
ither one
  pilot/
  laptop/
letters/
linux-world-briefing.sdd
list-aliases
lnet.8
location
  lpi-approved-logo.gif
lpic.general-linux-1.notes.pdf
lpi-japan-interfering-with-procert-contract
lpi-japan-interfering-with-procert-contract~
lpi-photo/
lpitest/
  lunar-0.1.lsm-0.2
lunar-lsm~
lunar.lsm
mail/
mailman.spec
master.cf
MAVICA.HTM
moonbase.html
morph
mozilla.ps
  mp3/
MVC-538F.411
muwheel.el
  MyPilot/
nazadus.log
  office02/

```

```
postfix/
postfix-1.1.4
Procmail/
publicity-discuss
Python-2.2.tgz
redhat.rc*
sendmail/
seksi.vim
server.key
shadow-build-error
skeltons/
snowrichards-phone
sorcery.update
src/
staroffice6.0/
tag/
translation
itakfdir/
vimrc
why-i-wanna-go-to-state
XF86Config
xfce@
xfce/
xfce3rc
xfce-old/
xfkdm/
xftm*
xinitrc.old*
xsession.old*
Xsessions*
ZackforNCSU.doc
ZackforNCSU.sxw
zappa_jfh_tr_5.wav.mp3
zinc/
```

web	work	pilot	code	node
can				
nail	lpi	art	edit	admin
can	can			

```
stealth
Linux 2.4.17
wed 15 May
16:37 41
```



0%
CPU
93 procs
5 users

Proc

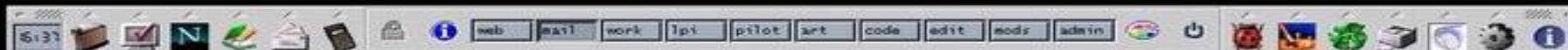
0 Disk

```
eth0
@ -/101
```

```
brutus 0/630
lunar 1/1209
mhfp 0/134
xfce 4/427
xfce4 0/69
xfce4 0/145
```

Vol 1 ■
Balls
Trabl
Pom
Spkr
CD ■

0d 19:07





Linus Torvalds.

(Linux) ykbuD l

- Tu 1991 e p r u k t f k e t l u j : k y k ; k x ; k f k A
- ; g ; f u D l d r j g d E l ; V j v k i j f V x f l L V e g t k y k b u D l d j u y (Linux Kernel) i j v k / k k f j r g A
- b l d k m i ; k x e [; r % l o j e v k i j f V x f l L V e d f y , g k r k g A
- ; g v k i u l k l l k T V o ; j g A



Linux

- **Linux is an open source operating system.**
- Thousands of programmers worldwide continuously enhance its features and back its development and support.
- **It is a Multi-Tasking, Multiprocessing operating system.**
- Originally, its designers had targeted it for personal computers, but today it is popular on all types of

- **Torvalds was a student at the university of Helsinki, Finland in early 1990's when he wrote the first version of an UNIX like kernel as a toy project.**
- He later posted the code on the internet and asked programmers across the world to help him build it into a working system. The result was Linux.
- **Torvalds holds the copyright but permits free**

- When someone submits a change or a feature, Torvalds and his core team of kernel developers reviews the merit of adding it to kernel source code
- **Linux Development Process:**
This is how the kernel evolves and matures to become better day-by-day.
- Application vendors and programmers download the freely available kernel and develop all types of application software for it.
- Distribution companies package and sell various

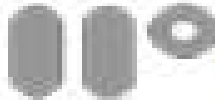


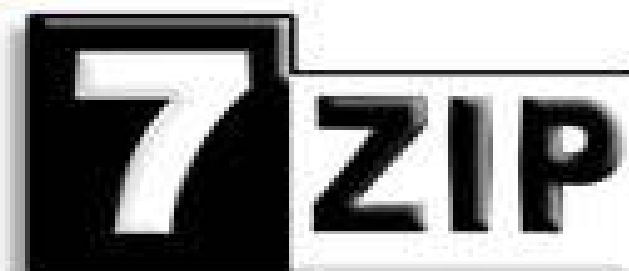







OpenOffice.org

 MediePortal



Audacity®

Basic Commands

- `passwd` change password
- `useradd` create new user account
- `userdel` delete user account
- `mount` mount file system
- `umount` unmount file system
- `df` show disk space usage
- `cp` copy file or directory
- `mv` move file or directory
- `rm` remove file or directory
- `mkdir` create directory
- `rmdir` remove directory

Basic commands

	Pipe (redirect) output
sudo [command]	run < command> in superuser mode
nohup [command]	run < command> immune to hangup signal
man [command]	display help pages of < command>
[command] &	run < command> and send task to background
>> [fileA]	append to fileA, preserving existing contents
> [fileA]	output to fileA, overwriting contents
echo -n	display a line of text
xargs	build command line from previous output
1>2&	Redirect stdout to stderr
fg %N	go to task N
jobs	list task
ctrl-z	suspend current task

File management

find	search for a file
ls -a -C -h	list content of directory
rm -r -f	remove files and directory
locate -i	find file, using updatedb(8) database
cp -a -R -i	copy files or directory
du -s	disk usage
file -b -i	identify the file type
mv -f -i	move files or directory
grep, egrep, fgrep -i -v	print lines matching pattern

File compression

tar xvfz	create or extract .tar or .tgz files
gzip, gunzip, zcat	create, extract or view .gz files
uuencode, uudecode	create or extract .Z files
zip, unzip -v	create or extract .ZIP files

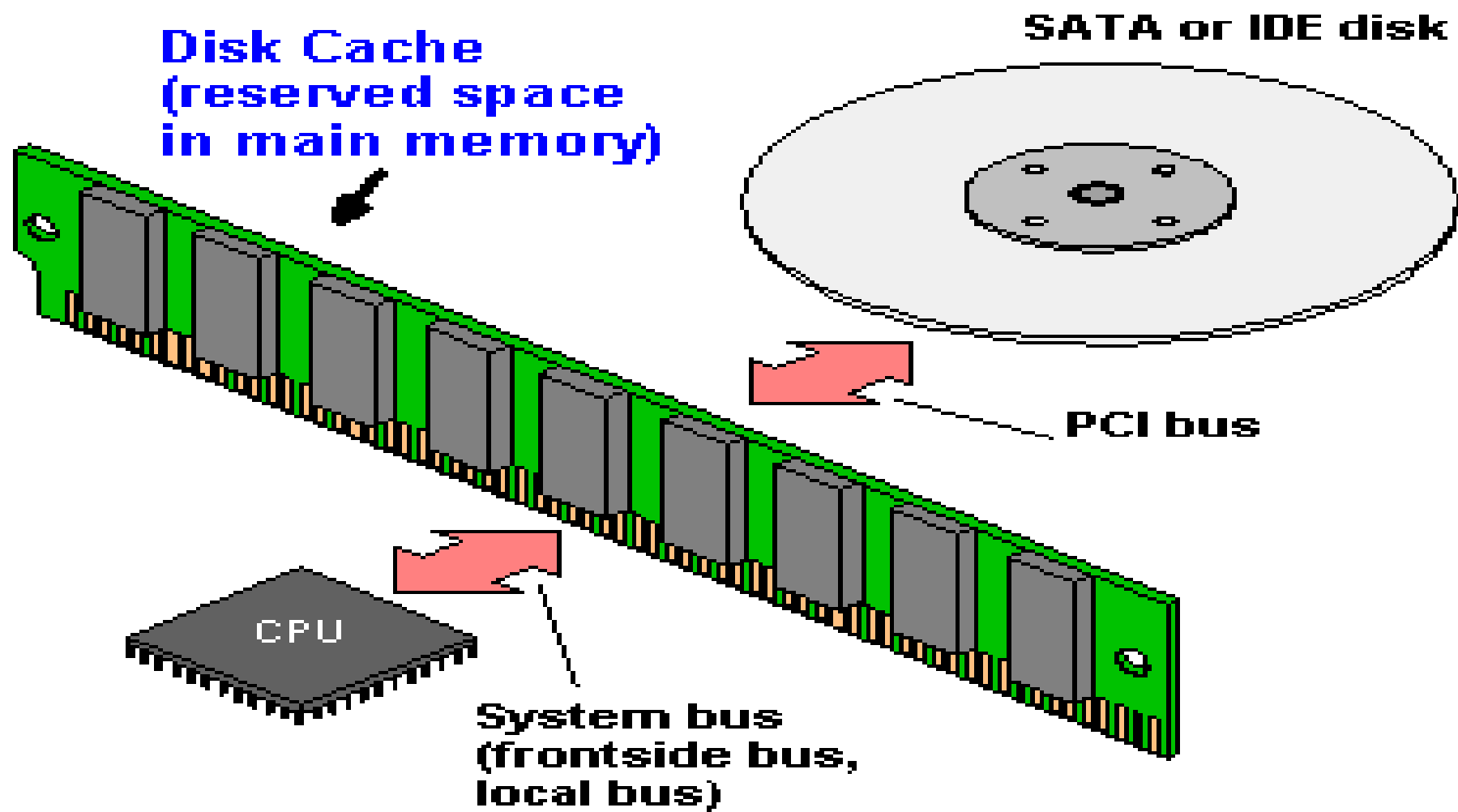
File Utilities

tr -d	translate or delete character
uniq -c -u	report or omit repeated lines
split -l	split file into pieces
wc -w	print newline, word, and byte counts for each file
head -n	output the first part of files
cut -s	remove section from file
diff -q	file compare, line by line
join -i	join lines of two files on a common field
more, less	view file content, one page at a time
sort -n	sort lines in text file
comm -3	compare two sorted files, line by line
cat -s	concatenate files to the standard output
tail -f	output last part of the file

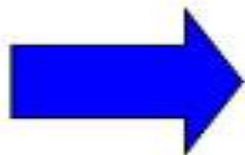
Virtual Memory

Virtual Memory

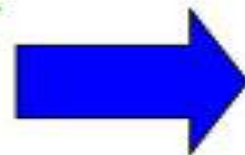
- ;g ,d **dkYifud Lefr {k=** g tk **vkijVx f l LVe }** **kjk**
l **effkr** (Supported) gA
- b l ge **eekjh ,M l dk fodYi** Hkh eku l dr g ft l
i **kxke fun'k rFkk MVk l xg d fy,** mi ; **kx djrk gA**
- opvy **eekjh dk mÍ' ; ,M l Li l dk c<kuk** gA
- ;g **gkM fMLd ij Li l g ft l CPU extended RAM** dh
rjg i ; **kx djrk gA**
- b l **vkft dv eekih** Hkh dak tk l drk a rFkk :a



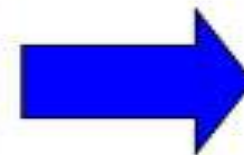
Hard Disk Drive



RAM Memory

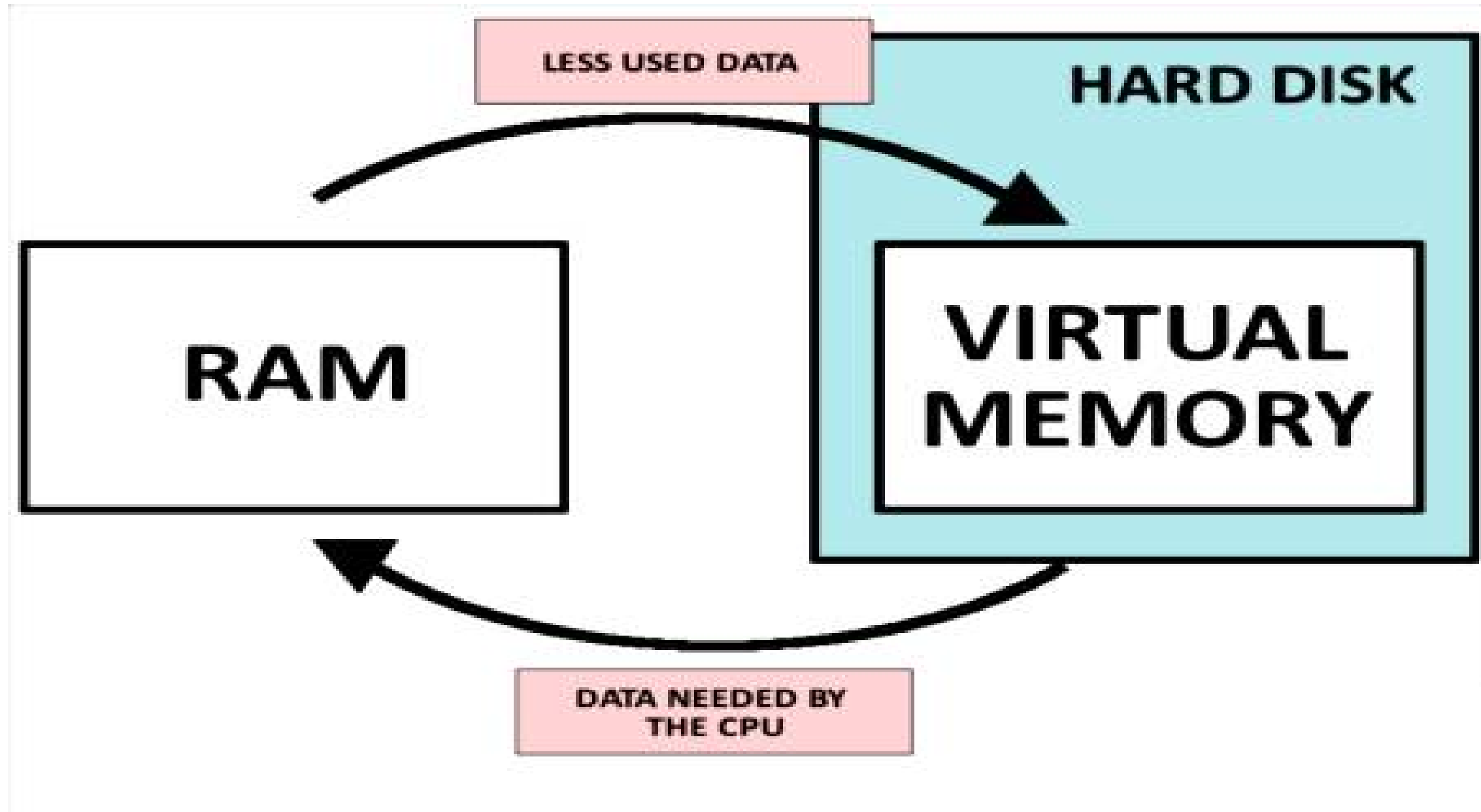


Chipset
(North Bridge)



CPU

Virtual Memory



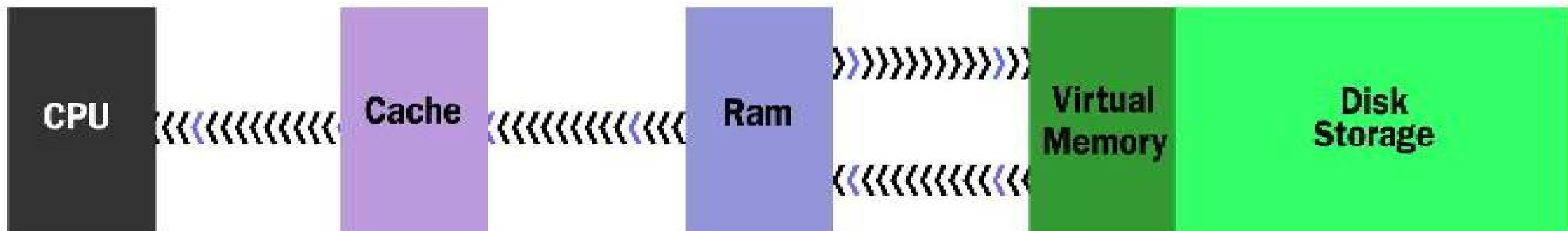
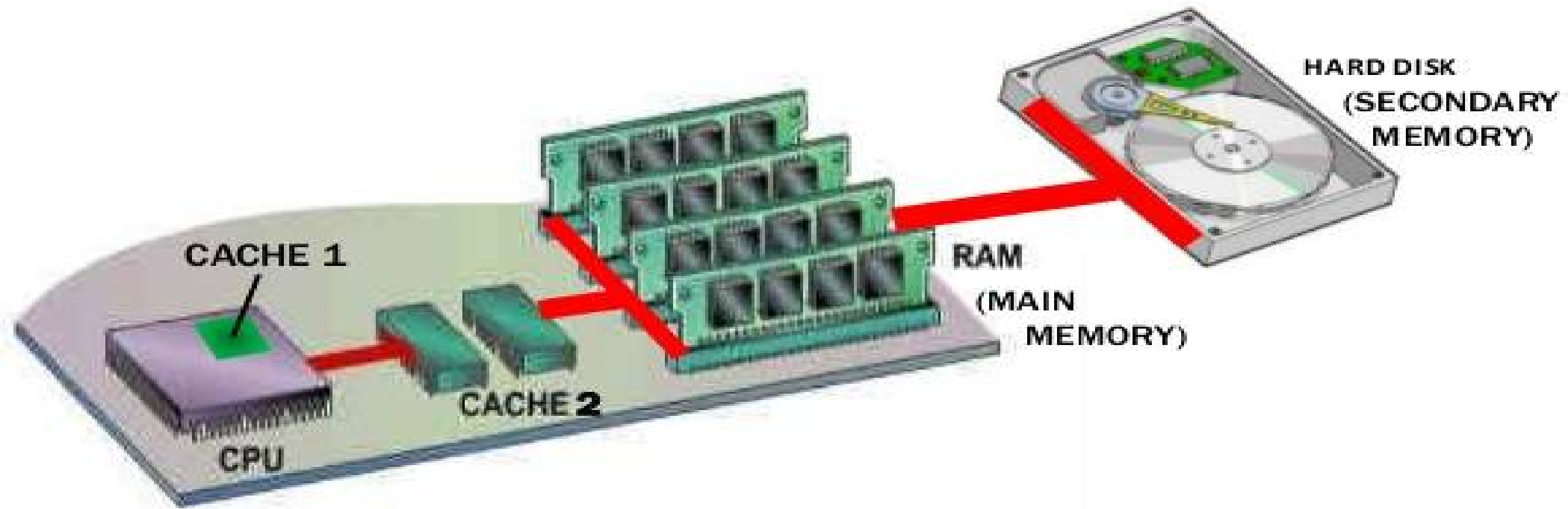
Virtual Memory

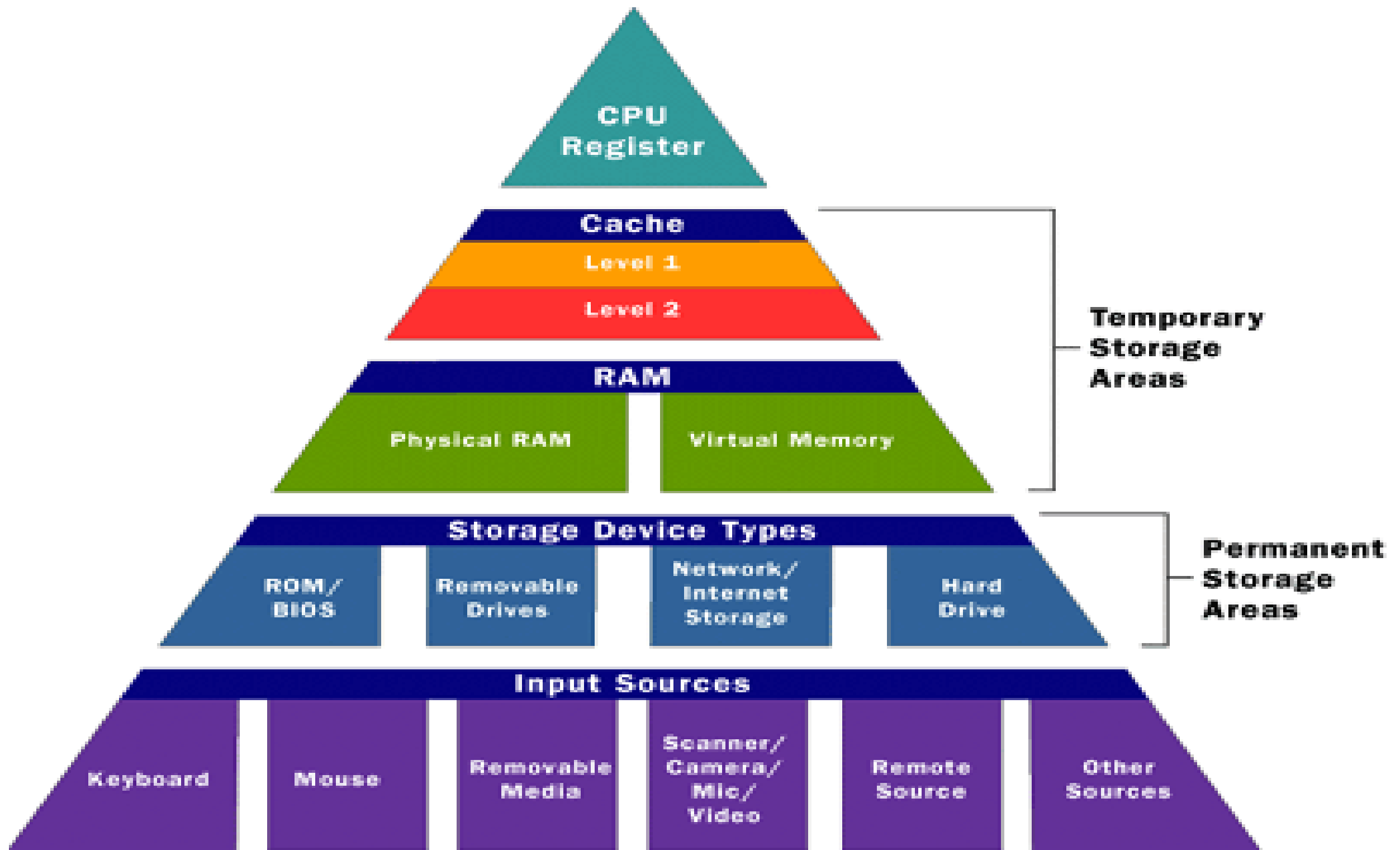
Windows - Virtual Memory Minimum Too Low

Your system is low on virtual memory. Windows is increasing the size of your virtual memory paging file. During this process, memory requests for some applications may be denied. For more information, see Help.



8:53 AM





DriveStation DDR – Ultra High Performance USB 3.0 HDD
HD-GDU3 – USB 3.0 Hard Drive with 1 GB DDR3 RAM Cache



HDD Native
Cache – 32 MB



PCB and controller for a 3.5" WD
HDD

Translator

Text

Interpreter

Verbal



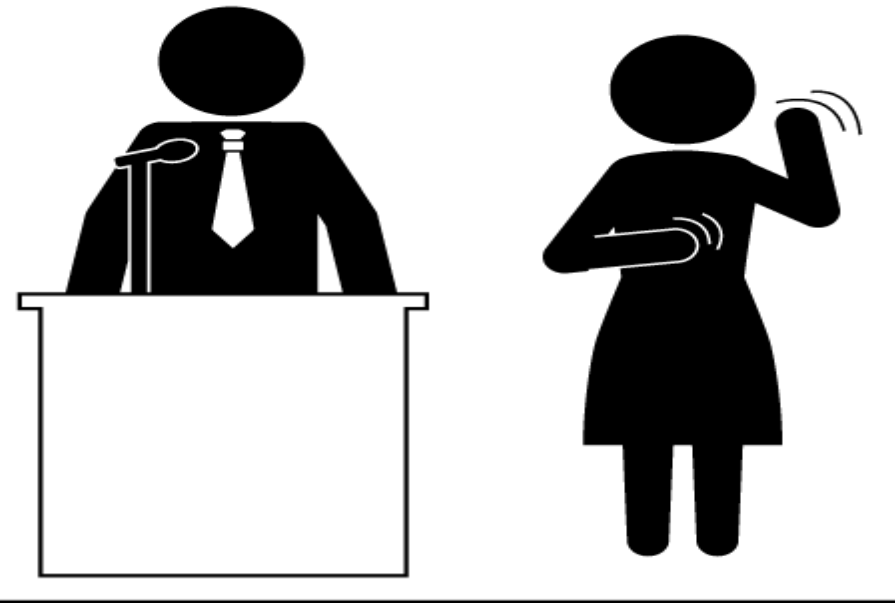
Translators

TRANSLATOR

ASSEMBLER

COMPILER

INTERPRETER



Translators

- **Translator** is a program that converts source code into machine code.

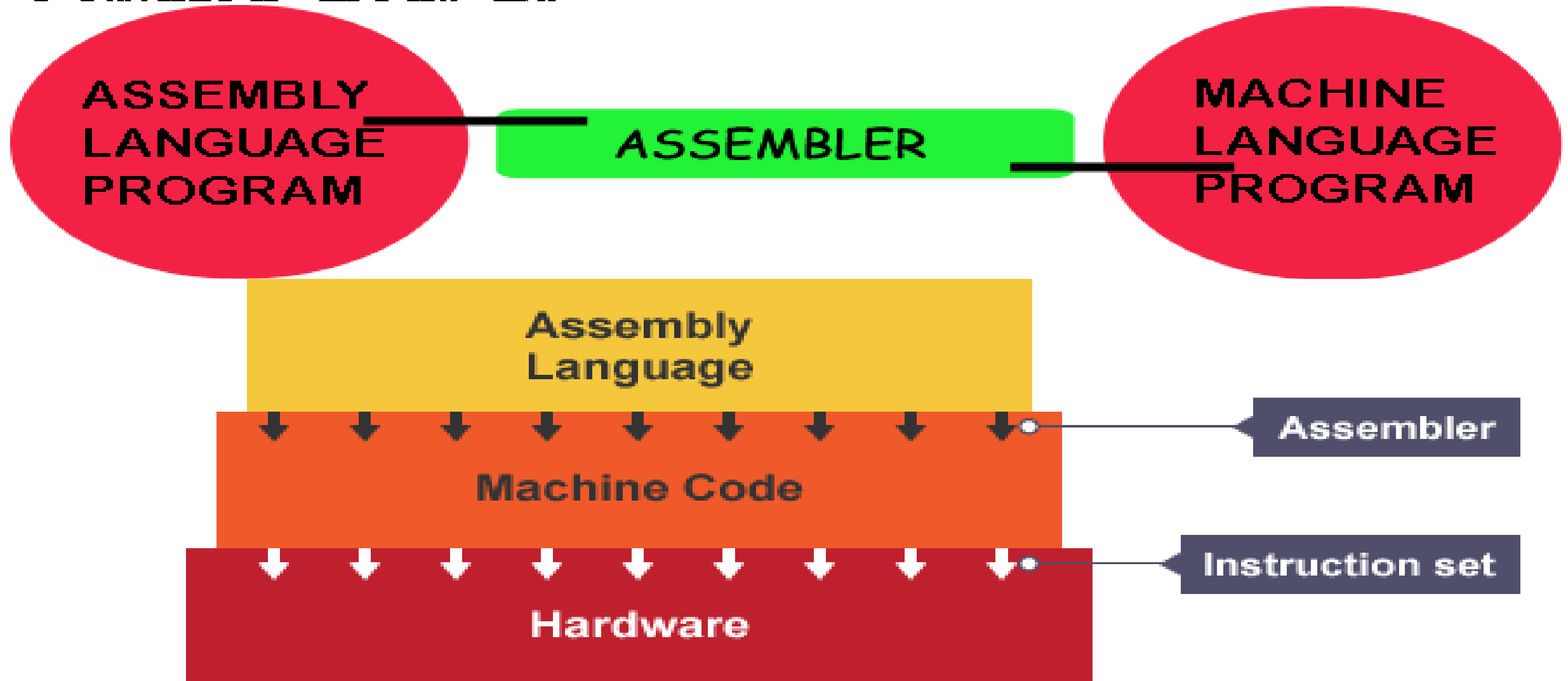
- **Types of Translators**

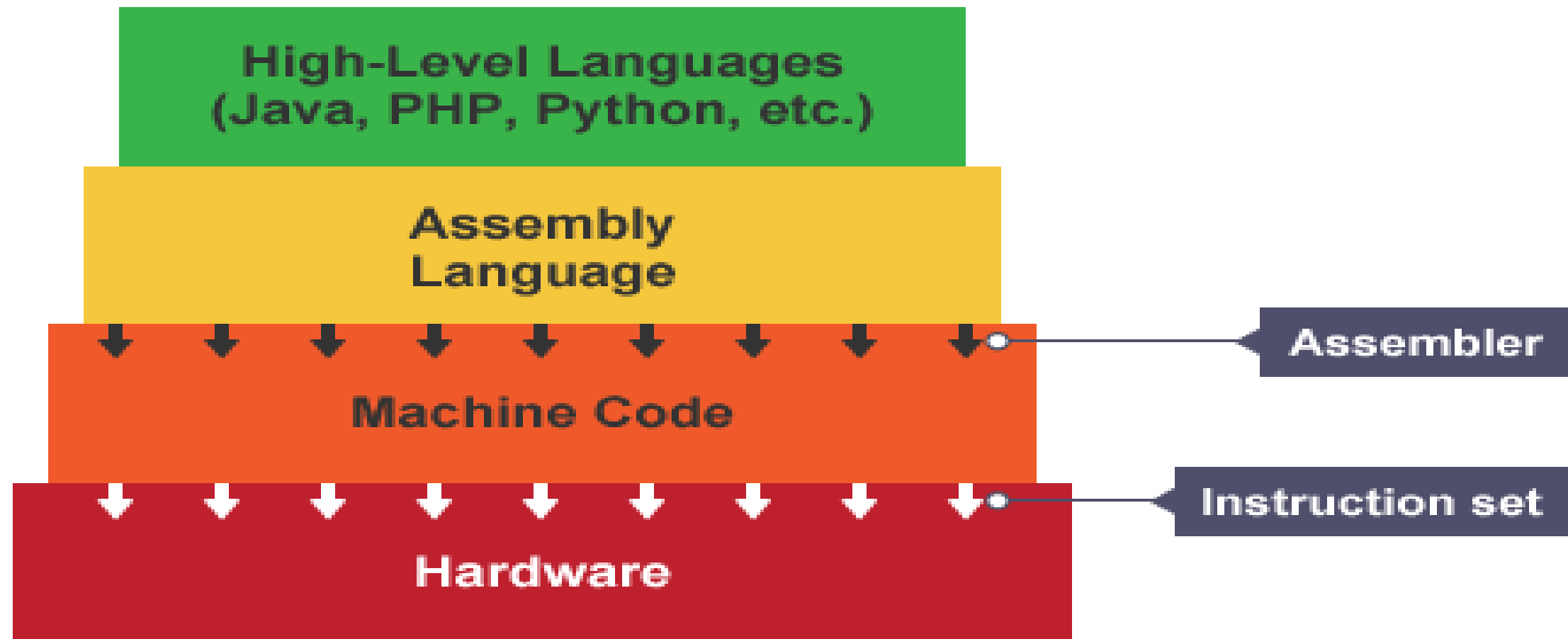
- 1- **Assembler** converts assembly language into machine code.
- 2- **Compiler** converts high-level language into machine code.
- 3- **Interpreter** converts high-level language into machine code and executes it.



Assembler

- ;g v lEcyh Hkk"kk e fy[k x; ikxke dk e'khuh Hkk"kk e





Computer
Instruction



Assembler

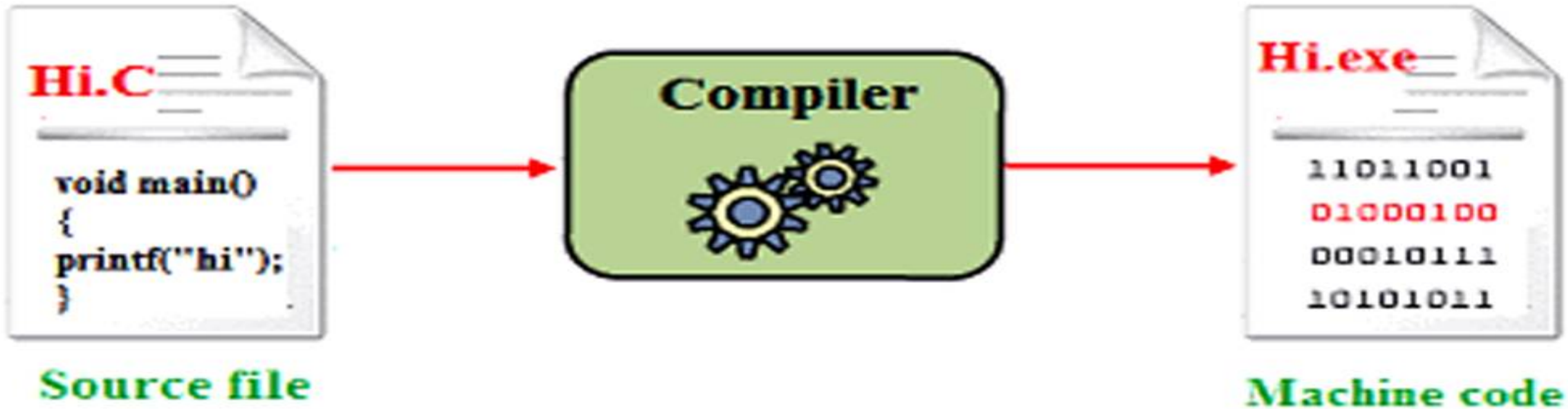


Binary 0's and 1's

COMPILER

- **dikbyj ,d ikke g tk mPpLrjh; Hkk"kk e fy[k x; ikke ;k L=kr (Source) dkM dk e'khu Hkk"kk ;k object ikke e : ikUrfjr djrk gA**
- **;g ij ikke dk ,d ckj e i<rk g rFkk lkjh xyfr;k dk crkrk gA**
- **xyfr;k nj gku ij ikke dk e'khu Hkk"kk e : ikUrfjr dj nrk gA**
- **dikbfyx d QyLo : i executable program dk fuek.k gkrk**

COMPILER



High Level
Language



Compiler



Lower Level Language

C Program

Compiling

**Machine
Language
Program**

Source
Code

Compiler

Binary
Code

Input

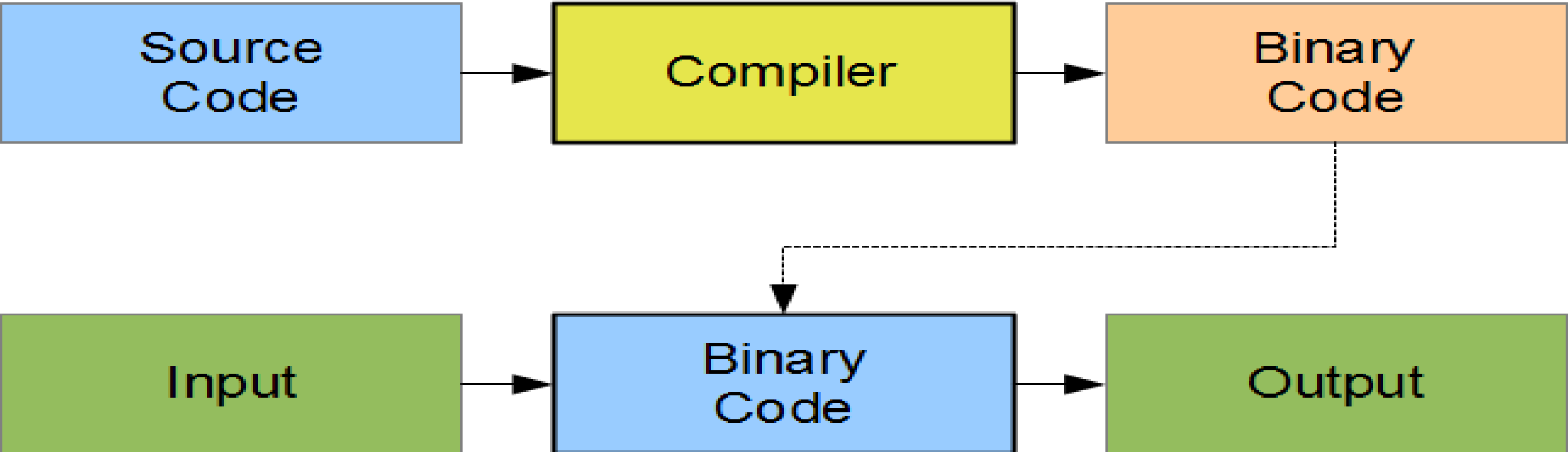
Binary
Code

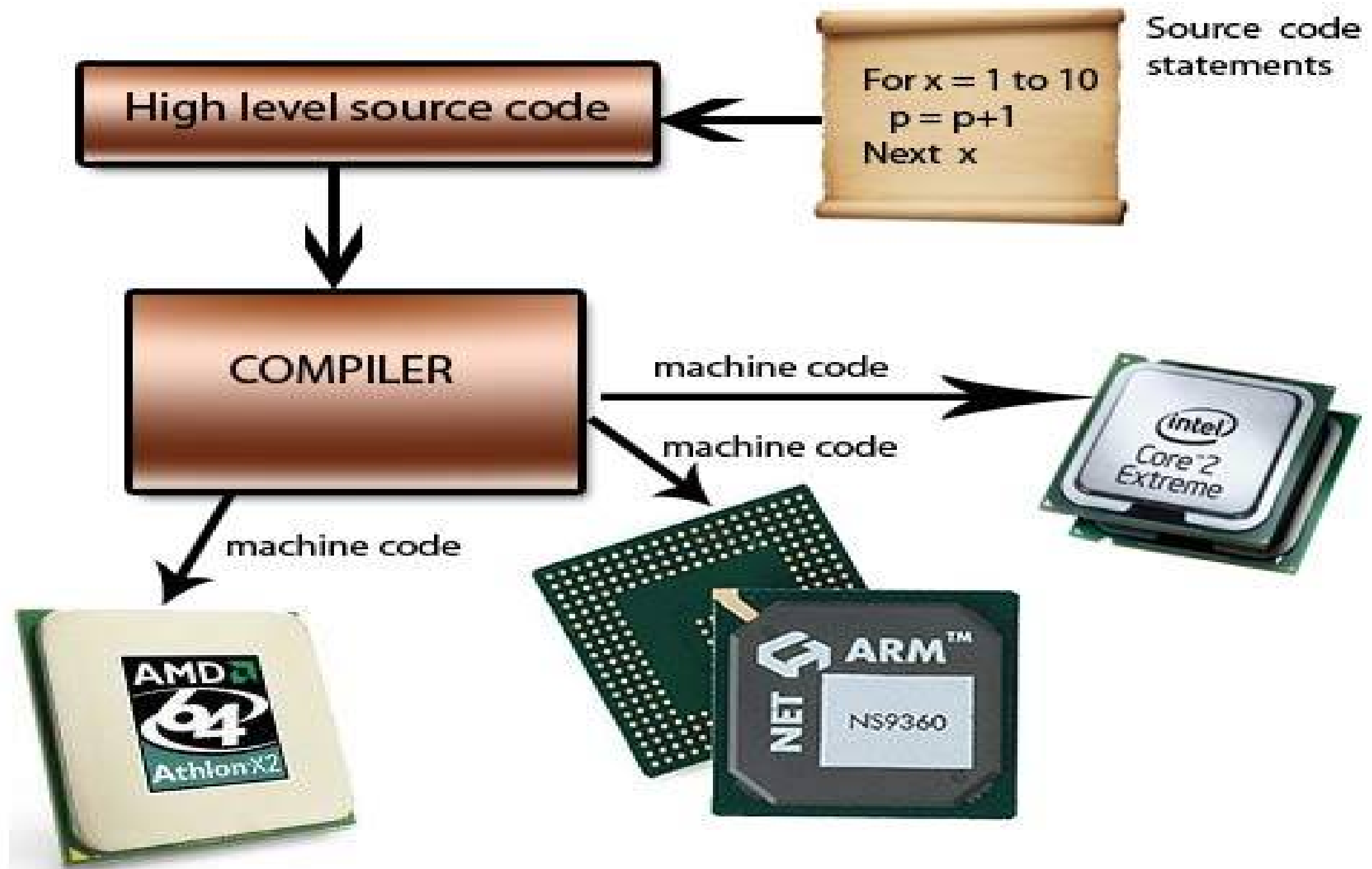
Output

User

Executing

User



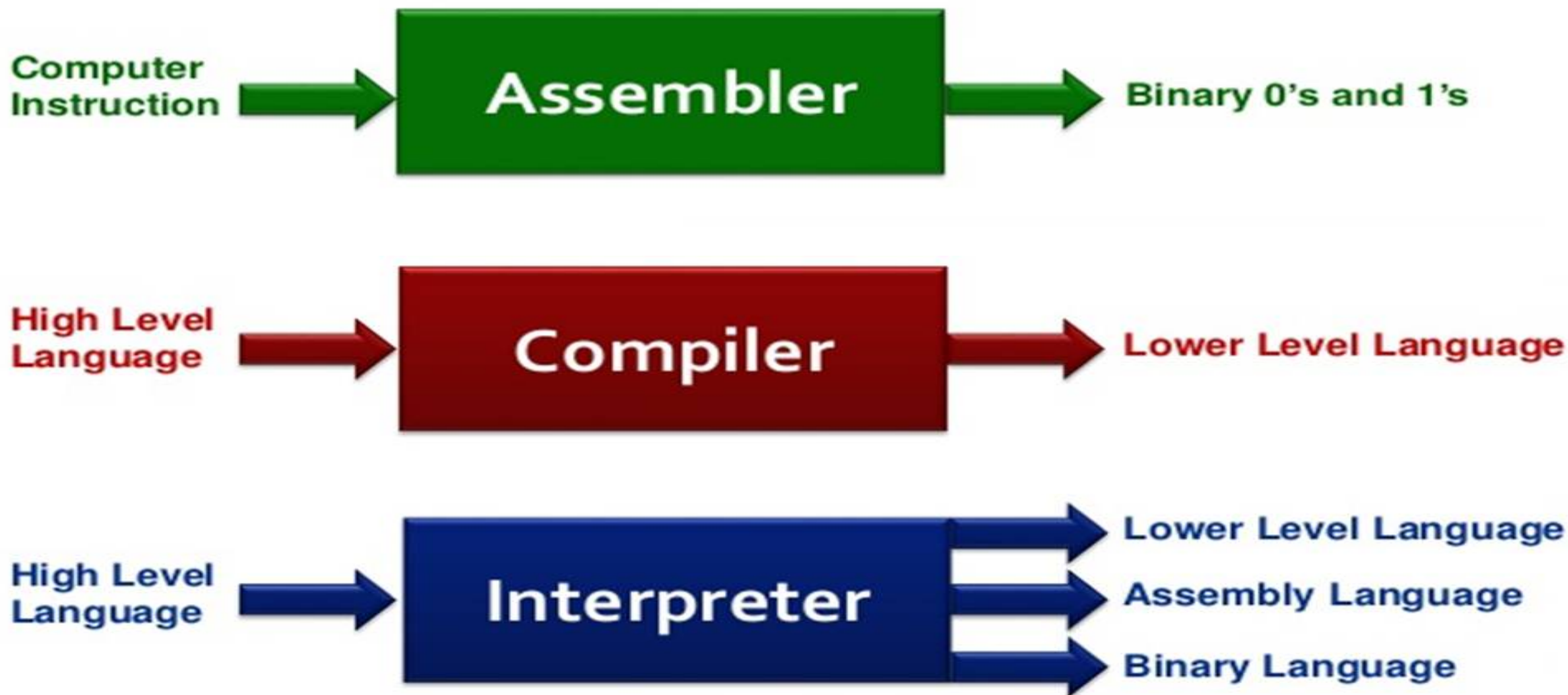


Interpreter

- ;g mPpLrjh; ixxfex Hkk"kk è fn; x; fun'kk dk fuEuLrjh; e''khuH Hkk"kk e Vkl yV djrk gA
- bVjiVj gj fun'k dk ,d&,d dj Vkl yV djrk gA
- ,d fun'k dk Vkl yV dj fcuk lxfgr fd; fØ;kUof;r (execute) djrk g] fQj nlj fun'k dk Vkl yV djrk gA
- bl rjg tc lkjk ikxe fØ;kUof;r gk tkrk g rk vUr e ifrfØ;k (Response) nrk gA



Interpreter, Compiler and Assembler



Device Driver

Device Driver

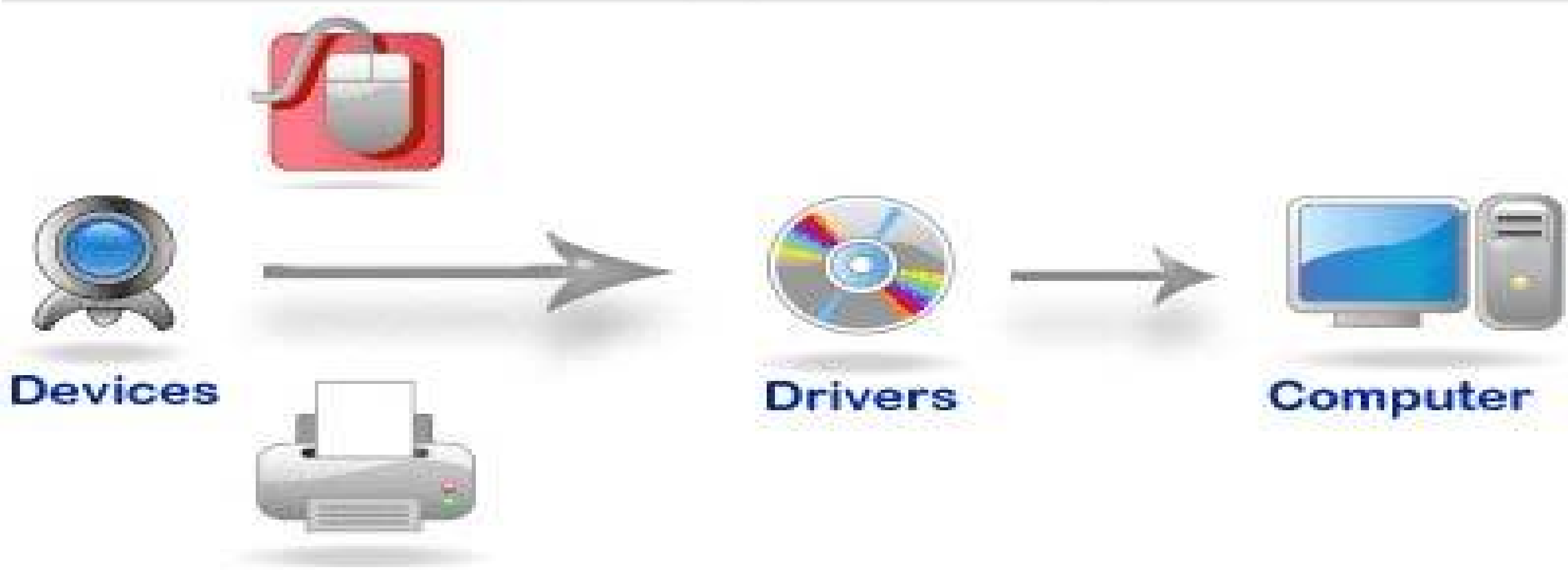
- The device driver is a software component that acts as an interface between the operating system and the hardware device. It translates the high-level commands from the OS into the low-level instructions that the hardware device can understand. The device driver is responsible for managing the hardware device's resources, such as memory and I/O, and for handling any errors that may occur. The device driver is typically installed on the system's hard drive and is loaded into memory when the operating system starts. The device driver is then responsible for communicating with the hardware device and for managing its operation. The device driver is a critical component of the operating system, and it is essential for the system to function properly. Without a device driver, the operating system would be unable to communicate with the hardware device, and the system would be unable to perform any tasks that require the use of the hardware device. The device driver is a complex piece of software, and it is often written in a low-level programming language such as C or C++. The device driver is typically written by the manufacturer of the hardware device, and it is often included in the device's documentation. The device driver is a key component of the operating system, and it is essential for the system to function properly. Without a device driver, the operating system would be unable to communicate with the hardware device, and the system would be unable to perform any tasks that require the use of the hardware device. The device driver is a complex piece of software, and it is often written in a low-level programming language such as C or C++. The device driver is typically written by the manufacturer of the hardware device, and it is often included in the device's documentation.



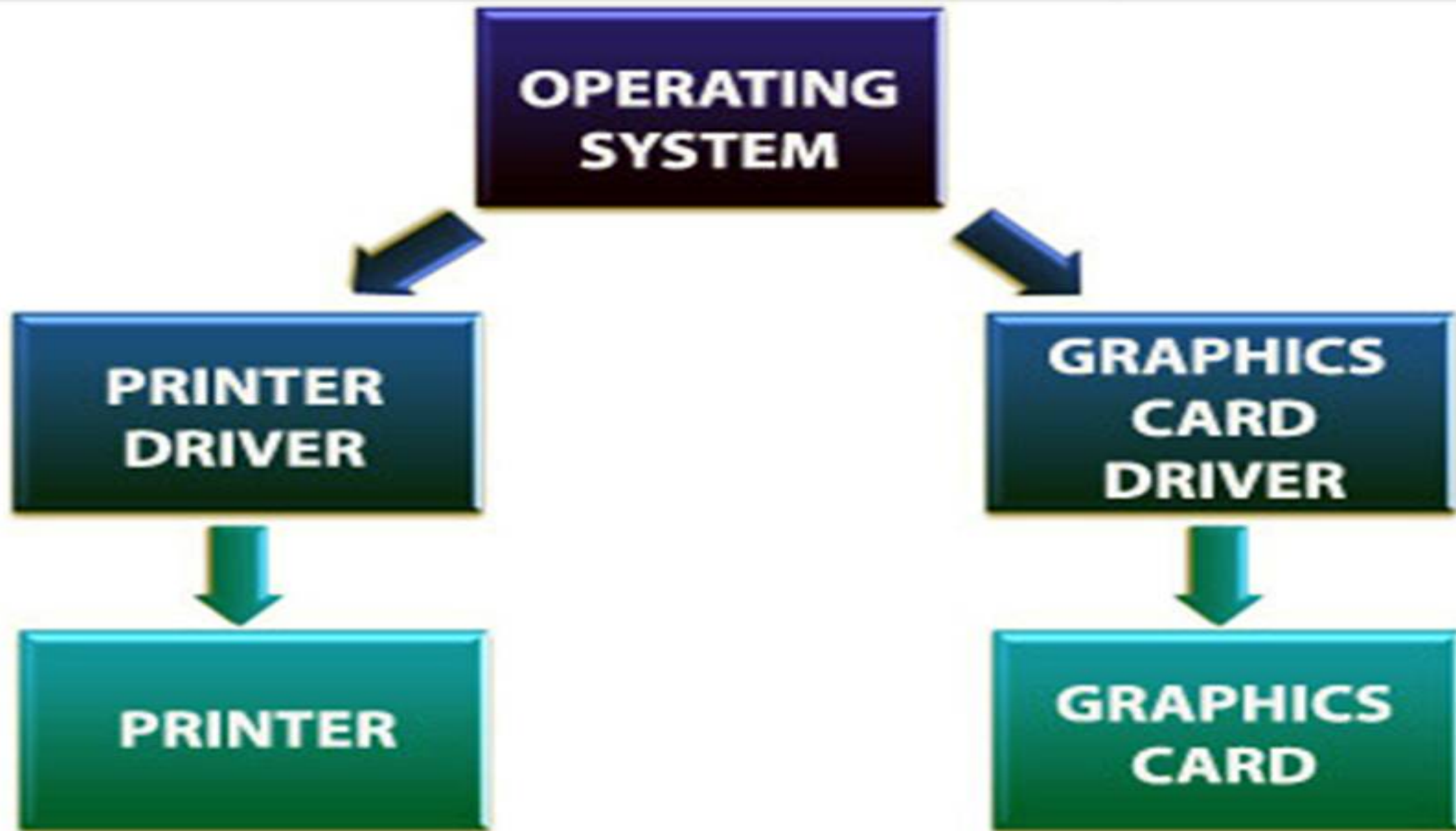
Device Driver



Device Driver



Device Driver



Application Software

Application Software

mi ; kfxrk d vk/kkj ij vui ; kx l kTVo ; j nk idkj
d gkr g %

1 -fo 'k" k vui ; kx l kTVo ; j

(Special Application Software)

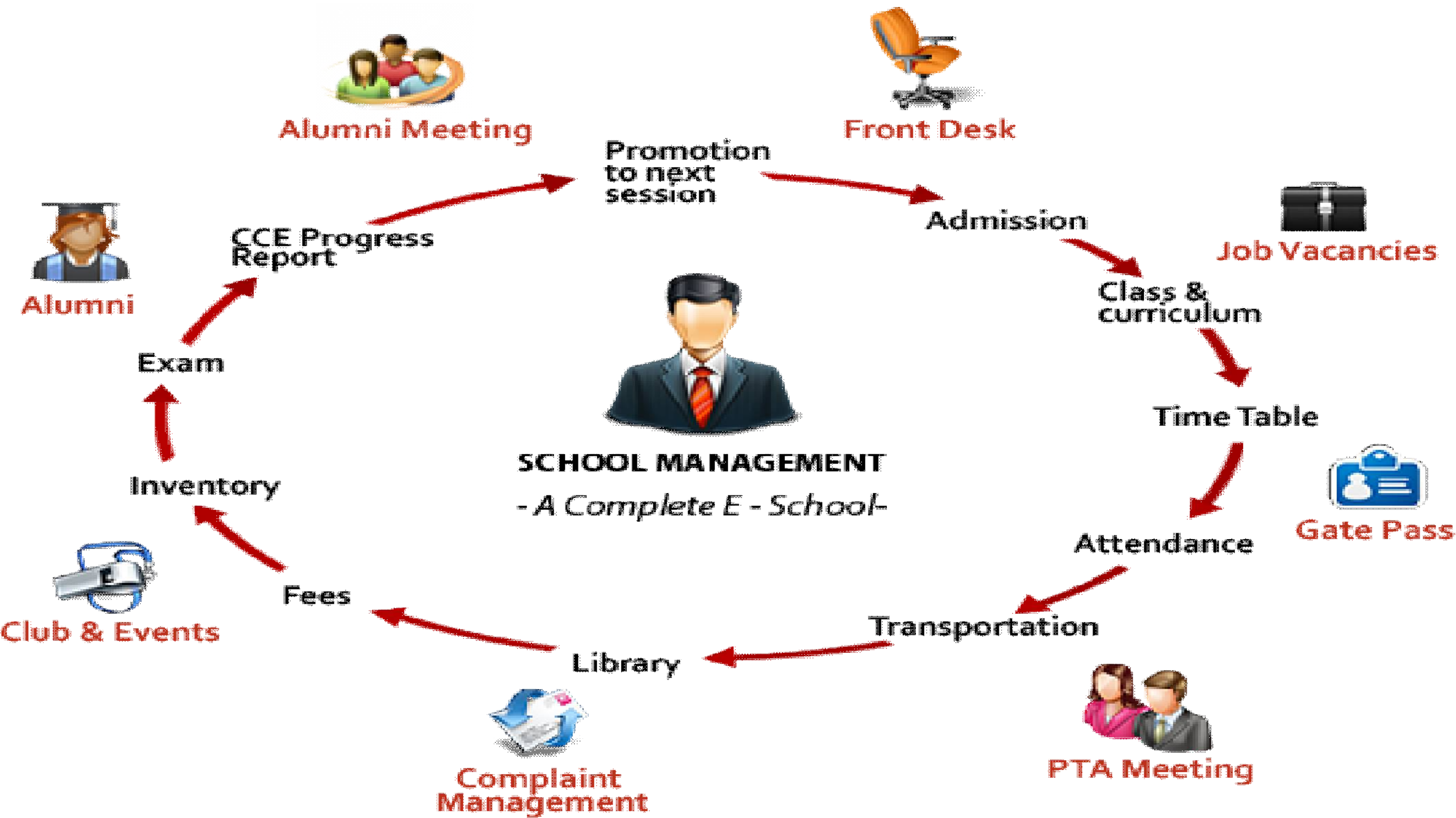
2 -l kekU ; vui ; kx l kTVo ; j

(General Function Application Software)

Special Application Software

Special Application Software

- ; g fd l h fo 'k" k dk ;! dk ijk dju e l {ke
gkrk gA
t l &
- ek l e foKku
- ok ; ; ku fu ; = . k
- fVdV vkj {k . k





OTHER ADMIN



Define Fees

Declare Fee Amount

Create Invoice

Add Invoice

Fee Payment

Fees Reports



Account Year

Account Name

Supplier

Customer

Product Master

Purchase Bill

Product Details

Receipt

Payment

Reports



Promotion

Bulk Promotion

Roll Over

Section Allocation

Transfer Certificate

View Transfer Certificate

Term Report for Weightage



Students

Employees

Parents



Message Inbox

Message Outbox

SMS Alerts

Mail Alerts

Alerts Setting

Visitor

Employee

NonEmployee

Contractor

Material

Vehicle

Key

Call

Miscellaneous

Report

Welcome: Administrator

Friday, February 08, 2008

Shortcuts

- >> New
- >> Search
- >> Create Appointment
- >> Appointment List

Visitor

Pass No* 123

Register* General

First Name Shibasis

Last Name* Prusty ?

Phone No 2355353

EMail ID shib@yahoo.co.in

Vehicle No TN-47-4172

Company cogent ?

Address Line 1 337-D,Royapettah

Address Line 2 Chennai

City Chennai

Pin Code 6000015

Remarks

udf1

udf2 <-Pick->

udf3 ?

Scan Card

Image



Capture

Clear

Purpose* Official

Visitor Type <-Pick->

To Meet* Hari ?

Department <-Pick->

Visitors Count 1

Time In* 08/02/2008 10:16 ?

Expected Time Out ?

Secure Area Cash Vault

Signature

Spusty..

Capture

Clear

Visitor Items

Save & Copy

Save

Cancel

Add Reservation

Common Information

Code *

Booking Time

Status *

User

Source

Guarantee

Room Information

Check In *

Check Out *

Adult No.

Child No.

Infant No.

Room *

Date	Rate
<No data to display>	

Guest Information

Guest Name *

Company

Email

Phone

Special Requirement

Payment Information

+ Add Payment			
Time	Pay Type	Total	Details
<No data to display>			

Billing Address

Address

City

State

Country

Post Code

Service Information

+ Add Service				
Date	Name	Rate	Qty	Subtotal
<No data to display>				

Room Total

Service Total

Net Total

Discount

Tax

Tax Total

Total

Paid

Balance

OK

Cancel

Reservations



RSV Search



New Reservation



Walk In



New Group



Quotation



Rooming List

Events



Event Search

Guests



Guests In House



Arrivals



Guest Profile

Main



Information



Reports



Global Online Connections



Events Chart

Rooms



Room info.



Room Status



Maid Assign.



Tape Chart



Availability



Free Rooms

Cashier



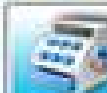
Currency Exch.



Find Folio



Search Folio



Cashier Shifts



Non Room Folio



Post Charges



Exit



Hospital Management System

Mitchell Memorial Hospital

144 E. Jackson Street, Thomasville,
Thomas County, GA 31792

- Patient Management
- Nursing
- Investigations
- Specialities
- Reports
- HR Management
- Resource Management
- Business Management
- Financial Management
- Store Management
- Pharmacy Management
- Canteen Management
- Laundry Management

Main Page

Patient Registration	Nursing	Investigations
Specialities	Reports	Doctor Consultation
Resource Management	Financial Management	Admin Management
Store Management	Pharmacy Management	Canteen Management
Laundry Management	Business Management	Search Patient Details

Patient Entry Form

Registration Number

Registration Date

Patient Name

City

Patient Address

TelePhone /
Mobile Number

Marital Status

Gender

Religion

Status

Father's / Husband's
Name

Age Yrs.

Add

Update

Edit

Search

Exit

General Function Application Software

General Function

Application Software

- **bl vud mi ;kxdrk mi ;kx dj ldr gA**
- **tc vko' ;drk cgr lkekU; lh gkrh g] rc**
vui ;kx idt Hkh i ;kx fd ;k tk ldrk gA
- **tl&**

General Function Application Software

- **Word Processor**
- **Electronic spreadsheet**
- **Presentation Software**
- **DTP-Desk Top Publishing**
- **Computer Graphics**
- **Accounting Package**
- **DBMS-Data Base Management System**
- **Report Generator**

Word Processor

- ;g dEl;Vj LØhu ij nLrkot r;kj dju e l gk; rk
djrk gA m l nLrkot dk : ikUrfjr] lxfgr rFkk
fiUV fd;k tk l drk g(t l &
- MS-Word
- Word Pad
- Word Star
- K-Word
- Open-Word Etc.

Electronic Spreadsheet

- ;g LØhu ij l[;k dk Vcy d : i e idV dju e
l {ke gkrk g] rFkk m l dh x.kuk dj l drk gA
- mu l[;kvk dk xkQ rFkk pkV d : i e Hkh 0;Dr dj
l dr gA t l &
 - MS-Excel
 - Lotus-1, 2, 3
 - K-Spread
 - Star calc
 - Open – Calc Etc.

Presentation Software

- b l d k m i ; k x ' k C n k v k j f p = k d k l t k d j d g k u h d g u j l k o t f u d i L r f r ; k l p u k n u e g k r k g A
- i L r f r l k t V o ; j d k i L r f r x k f Q D l H k h d g r g A t l &
- **MS Power Point**
- **K Presents**
- **Star Impress**
- **Slides**
- **Slide dog Etc.**

DTP - Desk Top Publishing

- de dher ij **vPNh x.koUkk** d l kfk idk”ku d fy, DTP l kVo;j i; kx fd;k tkrk gA
- ;g buiV] oM&ik l l j ;k l h/k DPT f l LVe l yrk g vkj ble byDVkfud : i l xkfQD l tkMdj it ijk fd;k tkrk g] fQj **mPp** fj tkY; l u vkmViV ;= l fiUV dj fy;k tkrk gA t l &
- **Page maker**
- **Corel Draw**
- **Photoshop**
- **MS – Publisher Etc.**

Computer Graphics

- **Computer Graphics Applications**
 - **AUTOAD**
 - **CATIA**
 - **3D MAX**
- **CAM (Computer Aided Manufacturing)**
 - **Hardware Graphics Etc.**

DBMS - Data Base Management

System or Database Software

- b l f l L V e d v u r x r t k H k h M V k g e d E l ; V j e L V k j d j u k p k g r g l m l b u i V d j u l i f j o r u d j u l Ø e c) d j u r F k k f j i k V r ; k j d j u d h l f o / k k n r k g A
- ; g M V k d k l f u ; k f t r f j d k M j [k u e l { k e g k r k g A t l &

- FoxPro
- Ms Access
- Ms-Excel
- D-Base
- Oracle

Report Generator

- ; g MVkc l l MVk ydj i ; kDrk d vko' ; drku l kj fofHkUu rjg d fj ikV r ; kj djrk gA
- t l &
- **RPG- Report Program Generator**
- **Crystal Report**

Accounting Package

- **bl ixke d mi ;kx l foùkh ; y[kkdu
(Accounting)] cd [kkrk] LVkd] vk ; vkj 0 ; ;
dk y[kk&t k[kk l jyrk l gkrk gA t l&**
- **Tally**
- **Marg – 9**
- **Busy**

General Function Application Software

Operating System	Word Processing	Spread sheet	Presentation	Database
MS-DOS-	Word Star	Lotus 1-2-3		D base
MS-Windows	Word Pad	MS-Excel	MS-Power Point	MS-Access
	MS-Word		Page Maker	
Linux-	K-Word	K-Spread	K-Presentes	
	Ab-Word	Open Calc		
	Open writer	Star Calc	Star Impress	Star Base
	Star writer			

Turnkey System

- A turnkey system is a complete solution that is ready to use as soon as it is delivered. It typically includes all the hardware, software, and services needed to get a system up and running. The provider of the turnkey system is responsible for the design, development, testing, and deployment of the system. The customer can then use the system without needing to worry about the underlying details.









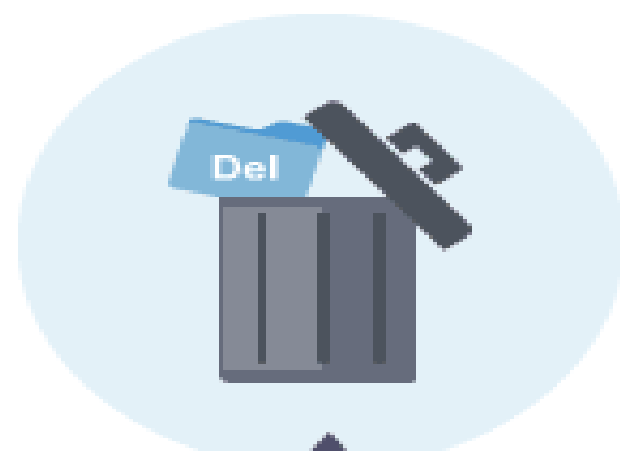
Free Ware

- Ýh o;j ,d lkVo;j g ft l fcuk eY; pdk; ;k
bViuV l Ýh MkmuvkM di l dr aA

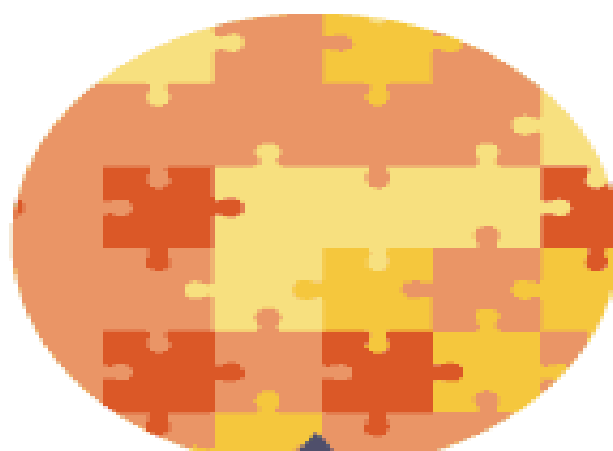


Utility Software

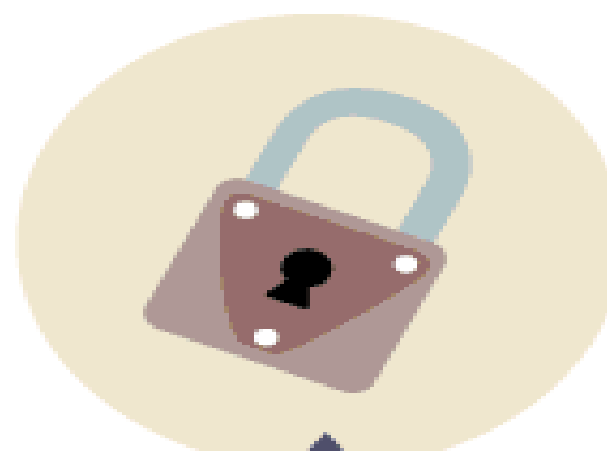
- ;g ,d NkVk lkTVo;j g tk vkijfVx fLLVe d
dk; {kerk e of) djrk gA
- ;g fo'k" : i l dEl;Vj gkMo;j] vkijfVx fLLVe ;k
vui;kx d ic/ku dk ,d lkFk dk; dju e lgk;rk
djrk gA ;VhfyVh lkTVo;j ,d dk; ;k dk; dk ,d
NkVk Hkkx ijk (Perform) djrk gA bldh lgk;rk l
dE;Vj dk mi;kx djuk vkj Hkh l jy gk tkrk gA



Deleting data



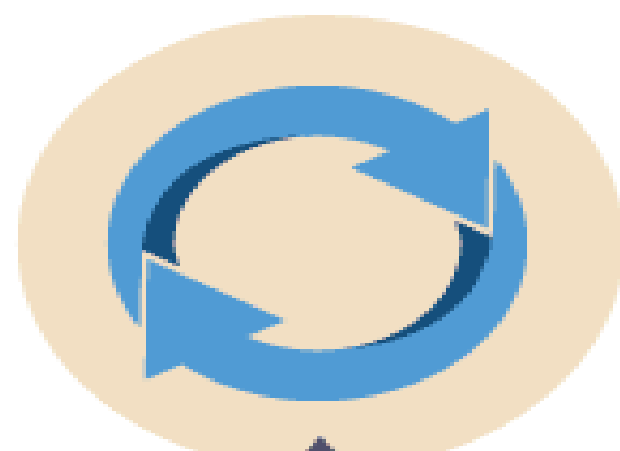
**Disk
defragmentation**



**User accounts
and security**



**Anti-virus
software**



Software updates



System cleanup



**Encryption/
decryption**



Formatting

Utility Software

**1 -fMLd QkefVx (Disk Formatting) % ;g gkMfMLd ;k
n l j HkMkj.k ek/ ;e dk mi ;kx dju d igy vkijfVx
f l LVe d vudy cuku e l gk ;rk djrk gA**

**2 -fMLd fDyuj (Disk Cleaner) % ;g mi ;kxdrk dk gkM
fMLd Hkj tku ij vuko” ;d ikxke dk gVku dk fu.k ;
yu e enn djrk g rFkk gVkdj eekjh dh {kerk e of)
djrk gA**

3 -fMLd iVko (Backup Program) % - n l kMfMLd - i

Utility Software

4 -fMLd dEi l u (Disk Compression) % ; I kTVo;j gkM
fMLd d I kj I pukvk dk dkEi l (Compre) dj nrk g
rkfd vkj I pukvk dk bue lxfgr fd;k tk l dA
LVkj t dh FkkMh I h txg e cgr I h Qkbyk dk LVkj
dju d fy, Qkby dEi l u (Compression) dk i;kx
fd;k tkrk gA

5 -ok;j l Lduj (Virus Scanner) % ; dEl;Vj Qkby rFkk
OkYMik d ok i l dk fuf'Ø: diu d fv l du dirk

Utility Software

6- **fMLd ÝxeV l u (Disk Fragmentation) % fMLd**
ÝxeV l m i ; k x d ù k d dEl ; Vj d gkMfMLd e
ÝxeV l u Qkbyk dk , d t xg tek dju dh ifØ ; k gA
fMLd ÝxeV l u , d Vy g ft l d m i ; k l gekj
dEl ; Vj d gkMfMLd e MkVk dk rearrange djrk g
rFkk ÝxeVM Qkbyk dk reuni te djrk g l ft l d
QyLo : i gekjk dEl ; Vj vf/kd l jyrk l dk ; dju e
l fke gkrk gA

Utility Software

ikxke MD;eV'ku (Program Documentation)

- ikxke MD;eV'ku ,d idkj dk MD;eV'ku g] tk fd lh ikxke dk foLrr fyf[kr fofoj.k nrk gA ikxke d l fy[k x;k g] ikxke dk VLV fj t YV D;k gkxk ;k ckn e ikxke d fodk l ;k eVu l e D;k ck/k, ;k {kerk g] ; l Hh ikxke MD;eV'ku e fyf[kr : i e jgn gA ;fn ;t j (User) tkuuk pkgn g fd ikxke okLrfod e D;k djrk g rFk ;g d l ,fd t D;V (Execute) gkxk rc mlg ikxke MD;eV'ku dh l gk;rk yuk

