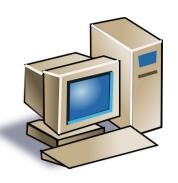


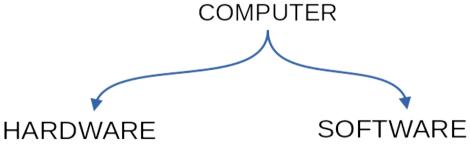
COMPUTER

Computer is an electronic device which is used to perform Specific Task. The term computer is derived from the Latin term 'Computare', it means calculate or programmable machine. Computer can't do anything without a program. Normally computer takes an input from user , process it & generate the output.



PROCESSING INPUT OUTPUT

Components of Computer



- 1. INPUT DEVICES
- 2. OUTPUT DEVICES
- 3. STORAGE DEVICES
- 4. OTHER COMPONENTS

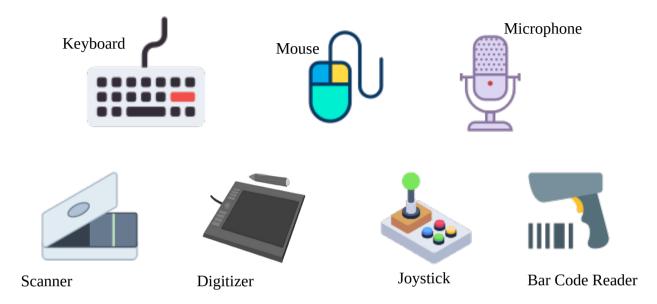
- 1. SYSTEM SOFTWARE
- 2. APPLICATION SOFTWARE



HARDWARE: Physical parts of computer are known as HARDWARE. we can touch those components.

Some hardware components are categorized as bellow.

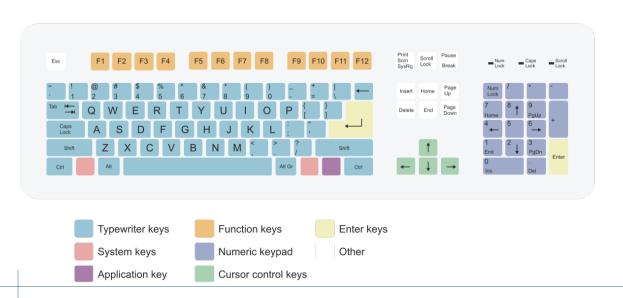
1. INPUT DEVICES



Keyboard

With Help of various keys we can easily manage more inputs to the computer. Keyboard is primary input device of the computer. Most computer functions(TASKS) are triggered by key commands, many of which cannot be performed with the mouse alone. This is a standard "QWERTY" keyboard.

- 104 keys on the Windows keyboard
- 83 keys on the first IBM PC keyboard (1981).
- 86-key laptop keyboard for Windows
- 109 keys on the Apple Keyboard with Numeric Keypad





Keys on keyboard are depends upon type of that particular keyboard.

I. QWERTY keyboard

These type of keyboards are comfortable and familiar for personal uses. The keyboard doesn't have numeric key pad.





If you wan to use numeric keys you have to put external key pad.

II. Numeric Keyboard

These types of keyboard have default numeric key pad. Which is mostly used in bank & industrial area.



III. Mechanical keyboard

These types of keyboard have deferent functionalities compare to previous keyboards use individual springs and switches to deploy each key.



Mechanical keyboard could be with numeric pad or without it.

Mouse

Mouse is an pointer device which is used to select, drag & drop a widgets of computer software. It is secondary input device of the computer.



There are 3 main keys/buttons in a mouse.

- i. **Primary** key is used to select or open the widgets of computer software.
- ii. **Secondary key** is used to see sub properties of widgets of computer software.
- iii. **Scroll Key** is used to scroll the screen without touching scroll bar of the screen.



Types of Mouse

I. Wired Mouse

Wired Mouse can be plug into computer with USB plug or PS/2 port. USB plug have abilities to Plug & Play. Which means you don't have to restart your computer after plug in the mouse. Whereas PS/2 takes restart or delay to start the mouse after plug in .

Wired connection has more accuracy than Wireless Connections.



II. Wireless Mouse



Wireless mouse can be attached to the computer with help of bluetooth or wifi connection.

Best advantage of wireless devices is we can use them with remote distance and worst thing is it may have network issue or time delay on action perform.

III. Laser Mouse

A laser mouse is a type of optical mouse that uses laser light to detect mouse movement. Like all optical mice, it has no moving parts inside. The laser mouse is more accurate than the standard LED optical mouse, although the latter has gotten much closer over the years.





Microphone

A microphone, colloquially called a mic or mike is a transducer that converts sound into an electrical signal. It is very useful to record voice or attend meeting calls online. Personal/ Desktop computer doesn't have mic on default configurations. We have to plug in external mic with



USB/XLR(3-pin, 5-pin, 7-pin, or other variants) port.

XLR(*External Line Return*) mostly used for **Headset** which have microphone & headset speaker to gather.

You can connect modern headset/ headphones/ mic etc with **TRS**(*Tip*, *Ring*, *Sleeve*) cables. However now most of all connectors are available with USB port supported **USB**(*Universal Serial Bus*) cable.







TRS cables



USB cables

Scanner

The device used to convert hard-copy of documents to soft-copy by scanning those documents. Scanner is very helpful to convert images/documents to digitally.

Hard-copy: touchable copy of documents called hard-copy. Mostly available with paper work.



Soft-copy: digital copy of documents like software called as soft-copy. To access soft-copy of the document we need software like image viewer, PDF reader etc based on that type of document.

Digitizer

A digitizer is a hardware device that receives analog information, such as sound or light, and records it digitally. It is used to draw or write by user with a light pen. It just like digital drawing book.





Joystick

It is also called as fight stick which is used to play games on the computer. Joysticks are often used to control video games, and usually have one or more push-buttons whose state can also be read by the computer. A popular variation of the joystick used on modern video game consoles is the analog stick.



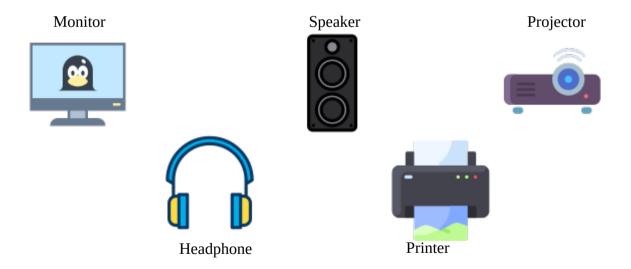


Bar Code Reader

Bar Code Reader is used to scan bar code & view bar code's information into the computer. Bar code can store more information than textual information. it consists of a light source, a lens and a light sensor for translating optical impulses into electrical signals.



2. OUTPUT DEVICES



Monitor:

Monitor is primary output of computer. It is also known as video display terminal. Textual, graphical information shown in monitor, for sound information we need speaker/headphones.



Types of Monitor /Display:

I. CRT

A CRT(Cathode Ray Tube) is an analog display device that creates a visible image on screen by redirecting electron rays. Breaking a CRT monitor or attempting to dismantle it without proper tools and training can lead to a severe electrical shock.



II. LCD



An LCD(liquid crystal display) monitor is a computer monitor or display that uses LCD technologies to display clear image. This technology replaced CRT monitors but LCD can have many weak or stuck pixels, which are permanently on or off.

III.LED

An LED(Light Emitting Diode) is a flat screen,flat-panel computer monitor or television. Their brightness allows them to be used outdoors where they are visible in the sun for store sign and billboards.



Speaker



A speaker is output device which is able to give us sound as output. The signal used to produce the sound that comes from a computer speaker is created by the computer's sound card. The sound measurement unit is **decibels**(dB).

Projector

A projector is an output device which is take images from computer & show them as a screen on projector screen. Projector is mostly used in companies/ schools for presentation.



Headphones

a pair of earphones joined by a band placed over the head, for listening to audio signals such as music or speech. Headset comes with headphones & microphone as we discussed previous microphone topic. Headphones are also support XLR, USB, TRS pins.



NOTE: in Most of Connections we use USB port as Modern Era.



Printer

A printer is output device which is used to convert soft-copy to hard-copy as opposite of Scanner. Now days we have Printer & Scanner into a single hardware device. A printer is very useful resource in offices, Schools, Hospital etc. you can call printer as basic need of Job fields.

Types of Printer:

I. Inject Printer

An Inject Printer is normally used in home/customer. We can used this printer for normal print-out. This printer uses ink to print information on the paper. We need to refill the ink after a while. An inject printer available in black & white or color printer. An inject tend to offer a good balance of quality, speed & price.



II. Dot Matrix Printer



This Printer is use dots to make images/ information on paper. Mostly used in to print bill, Tickets, sheets etc. A Dot Matrix Printer is more reliable than Inject & Laser printer.

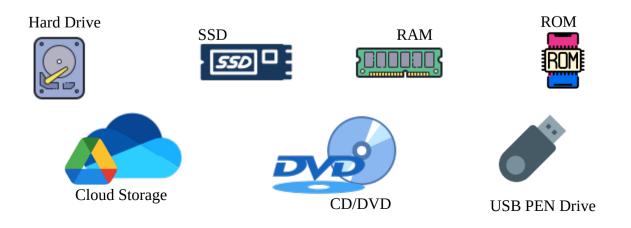
III. Laser Printer

Laser Printer uses a laser to heat a toner material that embeds itself into on to paper. Toner material is more expensive than ink, but its last longer. A Laser printer provide higher quality, faster speed than an Inject Printer.



3. Storage Devices

Storage devices is used to store information/date into itself. Without storing data to somewhere we cant access it later.





Hard Drive

A hard disk drive, hard disk, hard drive, or fixed disk is an electro-mechanical data storage device that stores and retrieves digital data using magnetic storage with one or more rigid rapidly rotating platters coated with magnetic material.





SSD

A solid-state drive is a solid-state storage device that uses integrated circuit(**IC**) assemblies to store data persistently, typically using flash memory, and functioning as secondary storage in the hierarchy of computer storage. Unlike hard drive SSD used flash & IC for data read/write. Nowadays SSD take over the hard drive.



RAM

Ram stands for *Random Access Memory*. It is volatile memory, which means memory only can store data while device/computer is on powered. When power gone stored data will be loose. Ram is more faster than Hard-Disk. Ram is more closer to Mother board than Hard-Disk. However Hard-Disk can store data long as long till data deleted manually. Hard-Disk could able to keep data safe even there is power off.



ROM

Rom stands for *Read Only Memory*. It is a type of storage medium that permanently(So its non-volatile memory) stores data on personal computers (PCs) and other

electronic devices. It contains the programming needed to start a PC, which is essential for boot-up; it performs major input/output tasks and holds programs or software instructions.



Cloud Storage

cloud storage is facility to store the data through internet with cloud computing model. Cloud computing in concept that is used to access hardware resources of someone through internet. For example With help of cloud computing you can you other's GPU & RAM to play games, you just need strong internet connection.

Cloud storage is portable more than pen-drive, you can login anywhere from any device to access your data which is uploaded. Google cloud, icloud is example of the cloud storage. Cloud storage isn't hardware but through applications/ network accessing someone's hardware.



CD/DVD

These disks are used to store data like ROM does. DVD(Digital Video Disc) is similar to the CD(Compact Disk) but DVD can store more data than CD. To access DVD/CD your computer must have CD drivers. Nowadays CD/DVD faded because for as portable storage device most of people use Pendrive/ cloud storage.



Pen-drive

Pen-drive have USB port that's why it is also known as USB(Universal Serial Bus) pen-drive/ flash-drive. It is plug & play, removable, re-writable light weighted.



4. Other Devices

SMPS



Motherboard



CPU





SMPS

SMPS stands for Switch Mode Power Supply which supply the power to motherboard, Hard-drive & other components of computer. SMPS convert AC/DC power source to DC loads for a PC(personal computer).



Motherboard



Motherboard is circuit that manage all connection among computer components. All ports are connected to the Motherboard. There are some slot available to connect Motherboard manufacturers include Acer, ASRock, Asus, Gigabyte Technology, Intel and Micro-Star International.

CPU

CPU stands for Central Processing Unit, the brain of computer. All operations are done here that's why its brain of computer. Higher configurations of CPU definitely helpful in computer better performance. The generation of processor(CPU) is matter, for example i5 11th generation is better than i7 3rd generation. Some processor have more cores that helps them to perform best. Intel & Ryzen are famous company for processor.



Software

Logical Part of computer is known as Software, software is untouchable part of the computer. We can see the software without touching. Software is line of code(Program) that perform some particulate task.

There are 2 types of Software

1. System software

There types of software are known as Operating System(**OS**) which are used to manage all hardware & Application Software. Technically OS is a bridge between hardware & Application Software.







Windows

MacOs

Linux



I. Windows

This OS usually used in personal uses, home or offices. It has user friendly Interface so non-technical person can enjoy the computer work. The First version of Windows was launch in 1985 as Window 1. There are various versions available of windows like Window 7,8, 10 & 11.

This OS own by Microsoft since 1985.

II. MacOs

MacOs(Macintosh) is an Unix Operation System which developed by Apple Inc. since 2001.MacOs only support Apple Inc's Hardware. If you want to install MacOs on normal hardware than it isn't easy steps. Apple Inc provide their hardware by their own manufactures.

MacOs first release was launch by 1999 as MacOs X.

III.Linux

Linux is also Unix based Operation System. Linux OS haven't own by a specific Organization, A foundation is managing all stuff of Linux named Linux Foundation. It is Open source Operation System unlike Windows & MacOs. Technically Linux is just kernel Program that helps you to manage Network, hardware, software more easily with CLI(Command Line Interface). Linux is more friendly for programmer.

The First version of Linux released in 1991.

2. Application Software

An application software is a program that perform a particular task. With Help of Os we can install Application software & use it. Application software make our life more easy. Some application software for Windows are here.





1. TYPING MASTER

Typing master is software that helps you to improve your typing speed. You can download this software by clicking "download typing master now".

2. MS PAINT

MS paint is used to create painting in computer. This is default program you no need to go external ways to get this software. It comes with when you install windows Operation System.

3. NOTEPAD

Notepad is a text-editor which have capabilities to edit/or open many types of files like .txt, .md, .xml, .csv etc. you can also view any file but notepad will display source code if file is not supportable via notepad. This is default software.

Notepad is light-weighted software but you can't graphical modification of the file because Notepad doesn't support color/graphics options.

4. WORD PAD

you can say Word pad is advance version of Notepad. Along with all file supports you can edit them via few limited colors. You have many new feature like scroll ruler, grid lines, finding elements with more easy way than notepad. Word pad is default software of Windows.

5. MS WORD

MS Word is best for Windows user who want to make better documents. It has more features than word pad/notepad. Most of people use ms word to make their documents like resume, report, pdf etc. this is part of Ms-Office, so you have to install MS-OFFICE first to use MS word. In some version of Windows 10 have ms-office default facility.

6. MS EXCEL

MS Excel is data-management application software which comes with MS-OFFICE. MS Excel wisely used to manage records/ details of organization. MS Excel provide formulas to manage/ calculate the data.

7. POWER POINT

Power point is application software that used for presentation. With help of Power point you can create more attractive presentations. Offices/schools use Power point to present their presentation. This application software belongs to MS-OFFICE.

8. MS ACCESS

MS-Access is application software that used to manage database of users. You can create your database with MS-Access. MS-Access allows you to create forms/reports of data. It also come with MS-OFFICE.



9. DOS

DOS – Disk Operating System also known as Command prompt. Which one provide CLI(Command Line Interface). DOS helps you to control whole System the commands.

10. GOOGLE CHROME

Google chrome is web browser which is used to visit websites, search google stuff & many more online purposes. You can download google chrome from download google chrome.

Network

Network is used to share resources to others. When two or more computer/devices connected to each-other, than network created. Network can be wireless or wired.

1. Wired network

Wired network connection establish with cables. It is faster than wireless connection. All devices are connected to each-other with physical medium. For hackers it is difficult to stole data because they have to present physically to the location.

2. Wireless Network

Wireless network can be created with Radio frequency. It is slower than Wired Network. For hackers, It is less difficult to access the data than Wired connection. Hackers may connect the network with remote distance. Types of Network Area wise.

1. LAN

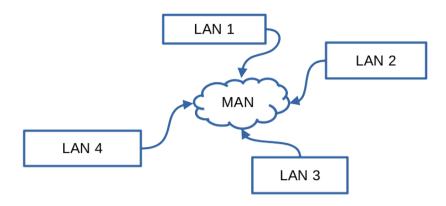
LAN stands for Local Area Network. This network establish in school, offices, houses, laboratory etc. LAN can cover 100-1000 meters.





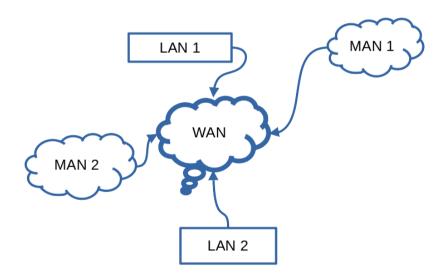
2. MAN

MAN stands for Metropolitan Area. This network establish in cities, huge organizations means larger than LAN. LAN is limited with a single building or a single place. However MAN covert more than a single place. Two or more LAN can create MAN via connecting each-other.



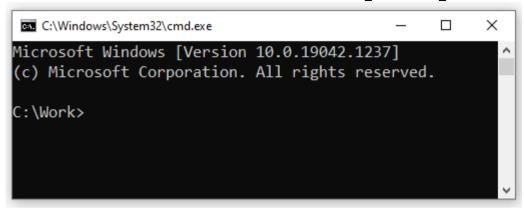
3. WAN

WAN stands for Wide Area Network. It may connect countries to countries or state to state. More than one MAN can create WAN by inter connecting each-other. These types of network can be establish via satellite or more MANs





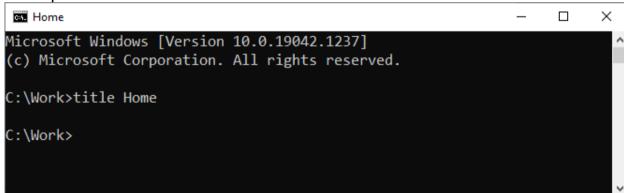
Commands in Command prompt



1. Title: used to set title of cmd windows

Syntax: title newTitle

Example:



2. Color: this cmd is used to set foreground & background color of command prompt.

Syntax: color BACKGRONDCODEFOREGROUNDCODE

Syntax: color FOREGROUNDCODE

Example:



NOTE: to see color Code type : color --help

3. **cd** (**change directory**): this cmd help us to change the location in cmd, means one directory to another one. Target directory must be exists. (NOTE: single . 'dot' means current directory & double .. 'dots' means parent directory)

Syntax:cd targetDirectory

Example:

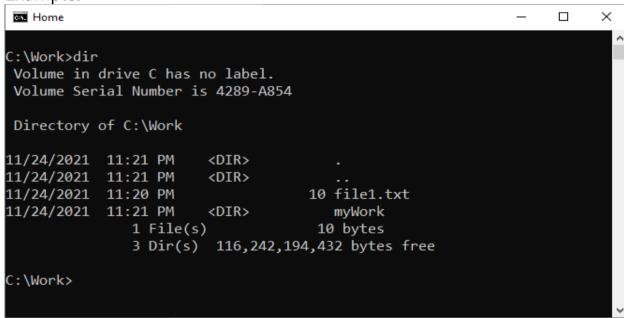




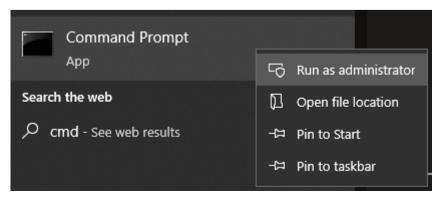
4. Dir: used to display content of directory(folder)

Syntax: dir targetDirectory

Example:

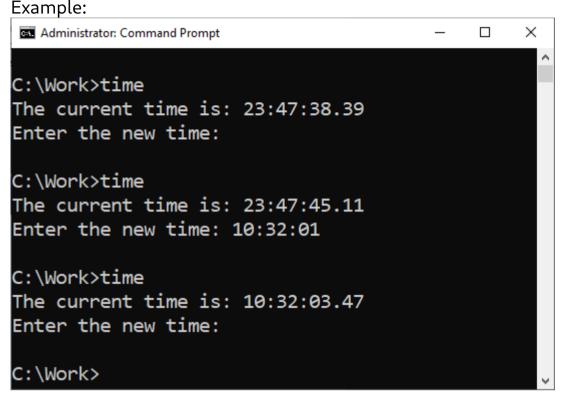


5. **Time:** to see & change time of system. NOTE: this cmd only work with Administrator cmd. To open cmd as Administrator open cmd as run as administrator. Otherwise a message "A required privilege is not held by the client." displayed.





Syntax: time



6. Date: to display & change date of system. This cmd also need to run in Administrator cmd.

Syntax : date Example:

```
C:\Work>date
The current date is: Wed 11/24/2021
Enter the new date: (mm-dd-yy) 01-08-22
```

7. Copy con: this cmd used to create file.

Syntax: copy con filename.extension

Example:



Press Ctrl+Z & enter to exit



8. Mkdir / md : these cmds are used to create directory.

Syntax: mkdir directoryName Syntax: md directoryName

Example:



9. del: this cmd is used to delete the file.

Syntax: del filename

Example:



10. rmdir / rd : These cmds are used to delete/remove directory.

Syntax : rmdir targetDirectory Syntax : rd targetDirectory

Example:



NOTE: if directory is not empty then try to delete forcefully.

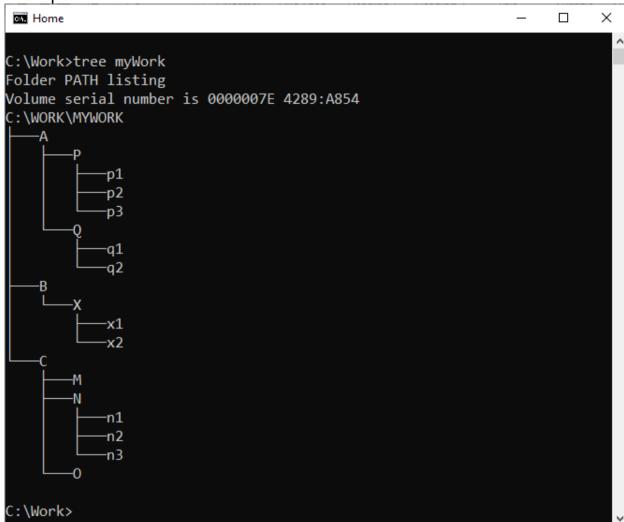
(cmd : rm /s targetDirectory)



11. tree: this cmd is used to see structure directories.

Syntax: tree targetDirectory

Example:



12. **Start**: to open Application/service from command prompt

Syntax: start ApplicationName

Example:



13. ipconfig: display the ip of system

Syntax: ifconfig

Example:





14. ping: this cmd helps to get ping between client & sever/host

Syntax: ping ip

Syntax: ping DomainName

Example:

```
C:\Work>ping 192.168.43.1

Pinging 192.168.43.1 with 32 bytes of data:
Reply from 192.168.43.1: bytes=32 time=1ms TTL=64
Reply from 192.168.43.1: bytes=32 time=2ms TTL=64
Reply from 192.168.43.1: bytes=32 time=2ms TTL=64

Ping statistics for 192.168.43.1:
Packets: Sent = 3, Received = 3, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
```

15. **exit**: exit from command prompt

Syntax: exit

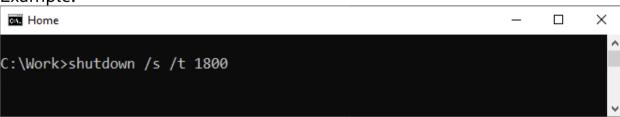


16.**Shutdown**: to logout/restart or shutdown to system

Syntax : shutdown /r /t seconds : to restart
Syntax : shutdown /l /t seconds : to logout
Syntax : shutdown /s /t seconds : to shutdown

Syntax : shutdown /a : to abort the action

Example:





Shortcut Keys

Basic Shortcut Keys	
Alt + F	File Menu options in current program.
Alt + E	Edit options in current program.
F1	Universal help.
Ctrl + A	Select all Text.
Ctrl + X	Cut Selected item.
Shift + Del	Cut Selected Item.
Ctrl + C	Copy Selected Item.
Ctrl + Ins	Copy Selected item.
Ctrl + V	Paste
Shift + Ins	Paste
Home	Go to beginning of current line
Ctrl + Home	Go to beginning of document
End	Go to end of current line
Ctrl + End	Go to end of document
Shift + Home	Highlight from current position to beginning of line
Shift + End	Highlight from current position to end of line
Ctrl + ←	Move one word to the left at a time
Ctrl + →	Move one word to the right at a time

MICROSOFT® WINDOWS® SHORTCUT KEYS		
Alt + Tab	Switch between open applications	
Alt + Shift + Tab	Switch backwards between open applications	
Alt + Print Screen	Create screen shot for current program	
Ctrl + Alt + Del	Reboot/Windows® task manage	
Ctrl + Esc	Bring up start menu	
Alt + Esc	Switch between applications on taskbar	
F2	Rename selected icon	
F3	Start find from desktop	
F4	Open the drive selection when browsing	
F5	Refresh contents	
Alt + F4	Close current open program	
Ctrl + F4	Close window in program	
Ctrl + Plus Key	Automatically adjust widths of all columns in Windows Explorer	
Alt + Enter	Open properties window of selected icon or program	
Shift + F10	Simulate right-click on selected item	
Shift + Del	Delete programs/files permanently	
Holding Shift During	Boot safe mode or bypass system files	
Bootup		
Holding Shift During	CD Player from playing	
Bootup		

WINKEY SHORTCUTS	
WINKEY + D	Bring desktop to the top of other windows
WINKEY + M	Minimize all windows
WINKEY + SHIFT + M	Undo the minimize done by WINKEY + M and
	WINKEY + D
WINKEY + E	Open Microsoft Explorer



WINKEY + Tab	Cycle through open programs on taskbar
WINKEY + F	Display the Windows® Search/Find feature
WINKEY + CTRL + F	Display the search for computers window
WINKEY + F1	Display the Microsoft® Windows® help
WINKEY + R	Open the run window
WINKEY + Pause /Break	Open the system properties window
WINKEY + U	Open utility manager
WINKEY + L	Lock the computer (Windows XP® & later)

WORD® SHORTCUT KEYS		
Ctrl + A	Select all contents of the page	
Ctrl + B	Bold highlighted selection	
Ctrl + C	Copy selected text	
Ctrl + X	Cut selected text	
Ctrl + N	Open new/blank document	
Ctrl + O	Open options	
Ctrl + P	Open the print window	
Ctrl + F	Open find box	
Ctrl + I	Italicize highlighted selection	
Ctrl + K	Insert link	
Ctrl + U	Underline highlighted selection	
Ctrl + V	Paste	
Ctrl + Y	Redo the last action performed	
Ctrl + Z	Undo last action	
Ctrl + G	Find and replace options	
Ctrl + H	Find and replace options Find and replace options	
Ctrl + J	Justify paragraph alignment	
Ctrl + L	Align selected text or line to the left	
Ctrl + Q	Align selected text of line to the left Align selected paragraph to the left	
Ctrl + E	Align selected paragraph to the center	
Ctrl + R	Align selected text or line to the center	
Ctrl + M	Indent the paragraph	
Ctrl + T	Hanging indent	
Ctrl + D	Font options	
Ctrl + Shift + F	Change the font	
Ctrl + Shift + >	Increase selected font +1	
Ctrl +]	Increase selected font +1	
Ctrl + Shift + <	Decrease selected font -1	
Ctrl + [Decrease selected font -1	
Ctrl + Shift + *	View or hide non printing characters	
Ctrl + ←	Move one word to the left	
Ctrl + →	Move one word to the right	
Ctrl + \^	Move to beginning of the line or paragraph	
Ctrl + /^	Move to the end of the paragraph	
Ctrl + Del	Delete word to right of cursor	
Ctrl + Backspace	Delete word to left of cursor	
Ctrl + End	Move cursor to end of document	
Ctrl + Home	Move cursor to beginning of document	
Ctrl + Space	Reset highlighted text to default font	
Ctrl + 1	Single-space lines	
Ctrl + 2	Double-space lines	
55 1	1	



Ctrl + 5	1.5-line spacing
Ctrl + Alt + 1	Change text to heading 1
Ctrl + Alt + 2	Change text to heading 2
Ctrl + Alt + 3	Change text to heading 3
F1	Open help
Shift + F3	Change case of selected text
Shift + Insert	Paste
F4	Repeat last action performed (Word 2000+)
F7	Spell check selected text and/or document
Shift + F7	Activate the thesaurus
F12	Save as
Ctrl + S	Save
Shift + F12	Save
Alt + Shift + D	Insert the current date
Alt + Shift + T	Insert the current time
Ctrl + W	Close document

	EXCEL® SHORTCUT KEYS	
F2	Edit the selected cell	
F5	Go to a specific cell	
F7	Spell check selected text and/or document	
F11	Create chart	
Ctrl + Shift + ;	Enter the current time	
Ctrl + ;	Enter the current date	
Alt + Shift + F1	Insert new worksheet	
Shift + F3	Open the Excel® formula window	
Shift + F5	Bring up search box	
Ctrl + A	Select all contents of worksheet	
Ctrl + B	Bold highlighted selection	
Ctrl + I	Italicize highlighted selection	
Ctrl + C	Copy selected text	
Ctrl + V	Paste	
Ctrl + D	Fill	
Ctrl + K	Insert link	
Ctrl + F	Open find and replace options	
Ctrl + G	Open go-to options	
Ctrl + H	Open find and replace options	
Ctrl + U	Underline highlighted selection	
Ctrl + Y	Underline selected text	
Ctrl + 5	Strikethrough highlighted selection	
Ctrl + O	Open options	
Ctrl + N	Open new document	
Ctrl + P	Open print dialog box	
Ctrl + S	Save	
Ctrl + Z	Undo last action	
Ctrl + F9	Minimize current window	
Ctrl + F10	Maximize currently selected window	
Ctrl + F6	Switch between open workbooks/windows	
Ctrl + Page up &	Move between Excel® worksheets in the same document	
Page Down		
Ctrl + Tab	Move between two or more open Excel® files	



Alt + =	Create formula to sum all of above cells
Ctrl + '	Insert value of above cell into current cell
Ctrl + Shift +!	Format number in comma format
Ctrl + Shift + \$	Format number in currency format
Ctrl + Shift + #	Format number in date format
Ctrl + Shift + %	Format number in percentage format
Ctrl + Shift + ^	Format number in scientific format
Ctrl + Shift + @	Format number in time format
Ctrl + →	Move to next section of text
Ctrl + Space	Select entire column
Shift + Space	Select entire row
Ctrl + W	Close document

OUTLOOK® SHORTCUT KEYS		
Alt + S	Send the email	
Ctrl + C	Copy selected text	
Ctrl + X	Cut selected text	
Ctrl + P	Open print dialog box	
Ctrl + K	Complete name/email typed in address bar	
Ctrl + B	Bold highlighted selection	
Ctrl + I	Italicize highlighted selection	
Ctrl + U	Underline highlighted selection	
Ctrl + R	Reply to an email	
Ctrl + F	Forward an email	
Ctrl + N	Create a new email	
Ctrl + Shift + A	Create a new appointment to your calendar	
Ctrl + Shift + O	Open the outbox	
Ctrl + Shift + I	Open the inbox	
Ctrl + Shift + K	Add a new task	
Ctrl + Shift + C	Create a new contact	
Ctrl + Shift+ J	Create a new journal entry	

Special Sign/Symbols

Sign	Name
~	Tilde
`	Acute, back quote
!	Exclamation mark, exclamation point, or bang
@	Ampersat, arobase, asperand, at, or at symbol
#	Octothorpe, number, pound, sharp, or hash
\$	Dollar sign or generic currency
%	Percent
٨	Caret or circumflex



&	Ampersand
*	Asterisk, mathematical multiplication symbol
(Open or left parenthesis
)	Close or right parenthesis
-	Hyphen, minus, or dash
_	Underscore
+	Plus
=	Equal
{	Open brace, squiggly brackets, or curly bracket
}	Close brace, squiggly brackets, or curly bracket
[Open bracket
]	Closed bracket
	Pipe, or, or vertical bar
\	Backslash
/	Forward slash
:	Colon
;	Semicolon
"	Quote, quotation mark, or inverted commas
•	Apostrophe or single quote
<	Less than or angle brackets
>	Greater than or angle brackets
,	Comma
•	Period, dot or full stop
?	Question mark