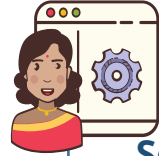




# WHAT IS OPERATING SYSTEM?



Serves as an intermediary  
between the user and  
computer hardware.



The base software  
program that runs  
on a computer.



Offers an environment  
in which a user can run  
programs conveniently  
and efficiently.



# WHY WE NEED



## AN OPERATING SYSTEM?



Hardware is the visible part of the computer system.



But it is more complex, direct interaction is not very effective.



It saves us from learning the computer's native language, the binary language.

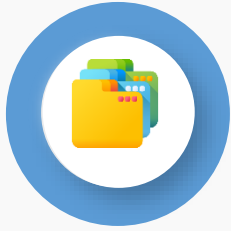


OS makes our interaction with hardware easier.



We need an easy language to interact with the computer.

# FUNCTIONS OF OPERATING SYSTEM



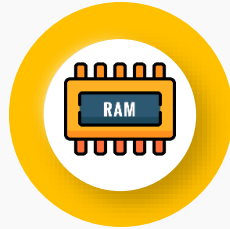
## File Management

- File creation
- File opening
- File closing
- File deletion



## Device Management

- Managing storage devices
- Input and output requests
- Allocating memory.



## Memory Management

- Allocate/deallocate memory.
- Memory distribution.



## Job Accounting/ Auditing

- Recording user activities in the system.
- Program swapping.
- Track memory usage.



## Process Management

- Program initiation and termination.
- Resource distribution.
- Memory management



# COMMON OPERATING SYSTEMS



## WINDOWS

**Microsoft** developed the Windows operating system and it comes preloaded on most of the personal computers.



## LINUX

An open-source software, which allows for worldwide distribution and modification.



## macOS

All Macintosh computers, sometimes known as Macs, already have it installed.



What is an Operating System?



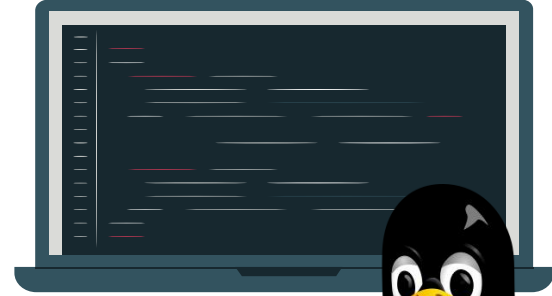
Functions of an Operating System



Common Operating Systems



# LINUX BASICS



**The most widely used Enterprise Operating System.**



Linux  
OS



Histo  
ry





# LINUX

Linux is a freely distributable version of Unix, originally developed by Linus Torvalds.



It can run on 32 bit and 64 bit hardware.

Linux distributions, or distros, are the names for Linux-based operating systems.

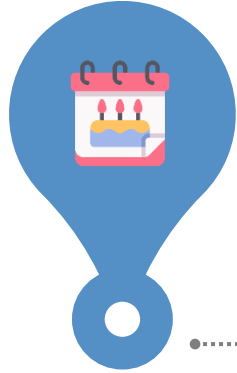


Fully capable of taking advantage of multi processors.





# HISTORY OF LINUX

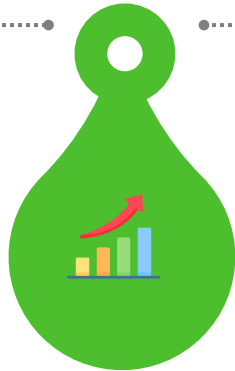


1969

Birth of 'C' and  
UNIX OS

1970's

Growth of Unix  
because of open-  
source collaboration.



1980's

Companies developing  
their own Unix- IBM(AIZ),  
Solaris(SunOs), HP(HP-UX)

Mid-to-late 1980s

Birth of free software  
movement (GNU Project)

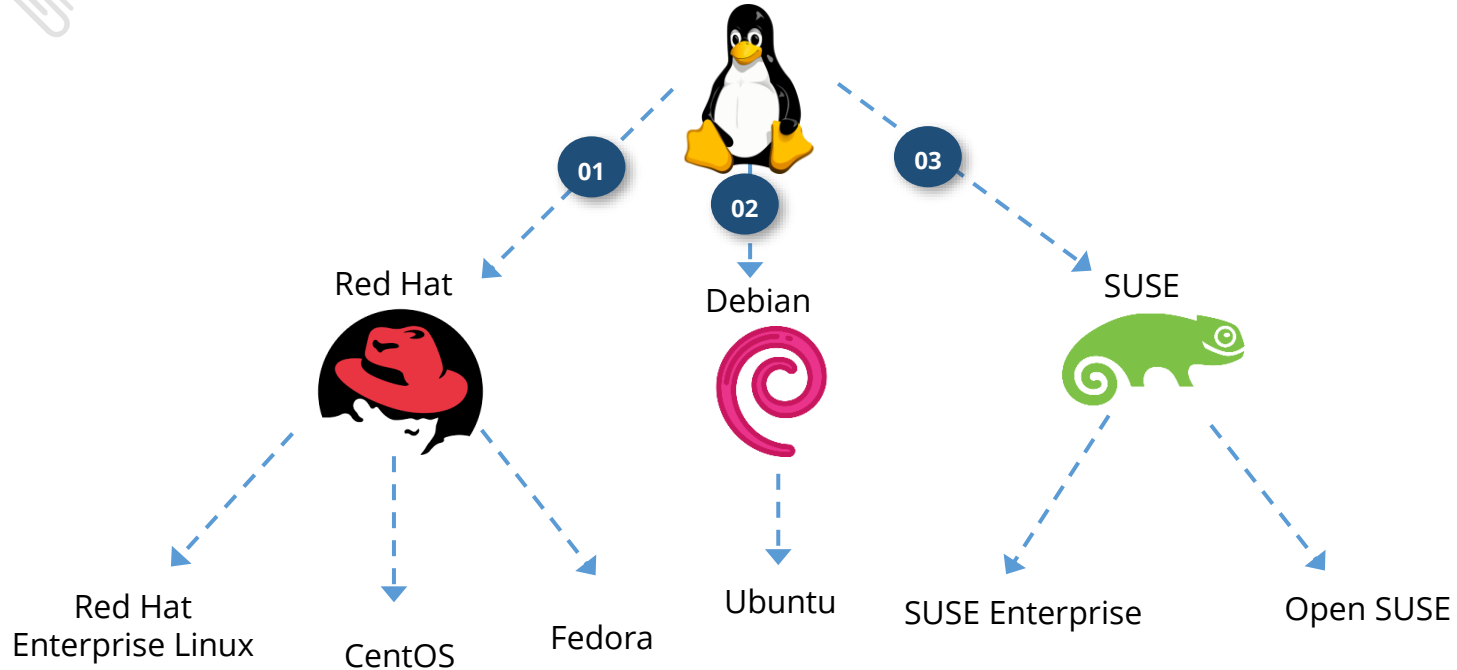


1991

Linus Torvalds put  
the Linux Kernel  
source code online.



# VARIOUS LINUX DISTRIBUTIONS





# LINUX IS FREE



Linux is a family of free and open-source operating systems.



Anyone can download and compile the source.



Anyone is free to run, edit, and redistribute the source code. They can even sell copies of the modified code.





# ARCHITECTURE OF LINUX SYSTEM

