# What is Linux

● Linux is a kernel.

## History of Linux

● In 1969 a team led by computer scientists Ken Thompson and Dennis Ritchie created the first version of UNIX on a PDP-7 minicomputer,

# WHAT is kernel?

● Kernel is a code/program that used to meet your Software and Hardware. And allocate some resources. ● Richard Stallman announced the GNU Linux project in 1983 and cofounded the Free Software Foundation in 1985. ● GNU is a free software replacement to the UNIX OS, But it was just software replacement not full os {Examples: Bash,tar,emacs…} . ● So GNU + LINUX will give the GNU/Linux OS. ● The GNU Linux project was started to create a Unix-like operating system created with source code that could be copied, modified, and redistributed

# What is Shell?

● Users communicate with the kernel by the shell. ● The Shell is a Command Line Interpreter. It translates commands entered by the user and converts them into a language that is understood by the Kernel.

# Types of shells

* Based on their features there are money shells.
* SH
* BASH
* ZSH
* FISH

They differ in Colouring,Piping,command compilation, some kind of features

# What is OS- Operating system??

● We have said UNIX and GNU/Linux as OS but what is OS. OS is “operating system”, which means the main software part of computer that helps to work on. ● It contains: ○ Kernel ○ Softwares ○ Desktop environment ○ File extensions ○ Window manager

# Types of desktop environment on linux

* A) mate
* B) gnome
* C) KDE plasma
* D) XFCE

# Which Desktop environment is best?

Speed depends on: ● Animations ● High Graphics ● Quality

# Why Linux?

● Most used ● Most hacking tools ● Most Secured!

# Linux distributions/distro

● Distro is Modified Linux Kernels,type of operating systems with different: So many distros…

# ● Debian

○ Kali linux ○ Ubuntu ○ Parrot

# ● Arch

○ Black arch ○ Garuda

# ● Fedora

# ● Red Hat

# ● Gentoo

# ● Android

# Which is best for hackers?

* Kali linux
* Parrot Os
* Garuda
* Black Arch