LINUX

Linux

- **Linux** is a family of <u>free and open-source software</u> <u>operating systems</u> built around the Linux kernel.
- Typically, Linux is <u>packaged</u> in a form known as a <u>Linux distribution</u> (or distro for short) for both desktop and server use.
- Kernel is a computer program that is the core of a computer's operating system, with complete control over everything in the system. It manages the hardware and tells it how to interact with the system.

Advantages

- Linux is free
- Linux is stable
- Better choice for programmers: various <u>libraries</u> are built natively for linux.
- Variety of distributions:
 - Linux distributions for hackers.
 - <u>Linux distributions for programmers</u>,
 - <u>Linux distributions for extremely old computers</u>. There is a Linux for everyone.
- Better Community support: Linux forums
 - Privacy: Even if you opt out to send Microsoft information about your data, it
 is still being collected. First of all, Linux distributions do not collect much data
 (or none). Moreover, you will not be needing additional tools to protect your
 privacy.

Disadvantages

- Many Windows programs will not run in Linux.
- There is a smaller selection of peripheral hardware drivers for Linux.
- There is a learning curve for people who are new to Linux.

What is Ubuntu

- Ubuntu is free and open-source distribution based on debian.
- Debian is a unix-like operating system.
- Linux is a family of unix-like operating systems. Debian belongs to the linux family.
- Unix is a family of multi-tasking, multi-user computer operating systems that include:
 - Linux
 - Android
 - iOS (iPhone, iPad)
 - macOS

An **operating system** is a system software that manages computer hardware and software resources and provides common services for computer programs.