

## **Intro to Linux**

### **1. What is linux / History of Linux**

- a. Linux is just like any other operating system, think windows and macos. An operating system is software that manages all of the hardware resources associated with your desktop or laptop, it manages the communication between your software and your hardware. Without the operating system (OS), the software wouldn't function.
- b. History of Linux.
  - i. In 1991, a finish student named Linus Torvalds started working on a personal project of creating his own system kernel which later became an entire operating system with the kernel at the center. You can read more about it here [History of Linux - Wikipedia](#)

### **2. Where is Linux Used**

- a. Linux is used everywhere, chances are that you have used it unknowingly.the Linux Kernel runs under the hood in your Android smartphone, smart tvs, routers, almost all IOT Devices
- b. How about desktops and laptops ? Since windows and macOS are the popular ones you won't walk in a shop and buy a linux laptop or computer . However one can intentionally install linux on their own machine. This is popular among developers.
- c. Raspberry Pi - yes the ones you are currently using if you are at the Adafruit Labs computer lab
- d. Multi-national, Big or small companies
- e. International Space Station - Red Hat Linux

### **3. What is open source**

- a. The primary categories of software are free, open and commercial software. Open source software is where one has access to all the source code and can manipulate according to his/her desire.
- b. Now you may be wondering isn't this the same as free software and the answer is yes. However not all free software is open source.
- c. Commercial software is the one you pay for. For instance Productivity software like office suites of products.
- d. Since windows and mac are the main OS's, commercial software companies develop software for mainly those two so in the event you can't afford to buy commercial software, there are many free alternatives that run on Linux. For example LibreOffice can be a good alternative to Office Productivity suite of products i.e Word, Excel & Powerpoint.
- e. Linux is an open source OS.[GitHub - torvalds/linux: Linux kernel source tree](#) People all round the world can contribute to make it better or customize it for commercial use. <Read more about how Linux changes are made.>