#Notes Lecture 1 ##What is Linux?

- Linux is a kernel.
- A kernel is the core of an operating system.
- Linux is a multitasking, multi user, multipurpose operating system
- Linux is an open-source operating system that is accessible to anyone who chooses to use it. ##What is a Linux Distribution?
- A linux distribution is any operating system that uses the Linux Kernel. ###Two of the major Linux Distributions
- Debian
- Redhat ###Two independent Distributions
- Slackware
- Arch
- Gentoo ##The GNU Public License
- The GPL is a free, copyleft license software and other kinds of works that guarantees end users th freedom to run, study, share, and modify the software.
- There are 3 version GPL v1, V2, and V3.
- Linux kernel is released under the GNU General Public License version 2. ##Open source vs Closed source vs Free software | Open Source | Closed Source | Free Software | |-----|------|-----| |The source code is distributed with the software|The user is restricted from modifying the code|The software can be free of charge or obtained by a fee| |The software may be distributed for a fee or free|The software is not distributed with the source code| The software is distributed with the source code ##What is Ubuntu
- Ubuntu is a Linux distribution, freely available with both community and professional support.
- The software should be available free of charge
- The software tools should be usable by people in their local language and despite any disabilities.
- Ubuntu is suitable for both desktop and server use.
    - Intel x86 (IBM-compatible PC)
    - AMD 64 (x86-64)
    - ARMv7
    - ARMv8 (ARM64)
    - IBM POWER8/POWER9 (ppc64el)
    - IBM Z zEC12/zEC13/z14
    - IBM LinuxOne Rockhopper l+ll/Emporer l+ll (s390x)