CPSC 254 Lab #2
Linux-based Operating Systems
(Originally prepared by David Heckathorn, modified by Shivansh Vijay Nathani, Tejaas Reddy)

1. Download and install at least two Linux Distros (Distributions)
   a. Screenshots of logins

2. Complete the template below for each downloaded distro.

3. Write and compile your "Hello World" program on each. You may use vi or any other text editor available. Nano is a good editor but you must install it.
   a. screen shot
4. What package manager do the distros use (e.g., apt, yum)?
   a. Answers and Screen shots

There are hundreds of Linux distributions. Below is a list of commonly used distributions.

1. Debians
2. Ubuntu
3. Linux Mint
4. Manjaro
5. Antergos
6. Chakra
7. Fedora
8. CentOS
9. Oracle Linux
10. Open Suse

These 10 distributions are derived from 4 major distributions.

1. Debian (Derivatives: Ubuntu, Linux Mint)

2. Arch Linux (Derivatives: Manjaro, Antergos, Chakra)

3. Red Hat Linux (Derivatives: Fedora, CentOS, Oracle Linux

4. Open Suse

Most distributions ship with a desktop environment. The most commonly used ones are *Gnome* and *KDE*. However, there are other GUIs such as *XFCE*, *Cinnamon*, *Mate*, *Unity*, and so forth.

Distributions often prefer a package manager. Debian-based distributions often use *apt*, Arch Linux-based distributions often use *pacman*, and Red Hat-based distributions often use *yum* or *dnf*. Open Suse-based distributions use several package managers including *apt* and *yum*.

Homework
Linux-based Operating Systems Distribution_template

1. Description

1.1. Current version

1.2. Derivatives

1.3. Licensing

1.4. History

2. Installation[edit]

3. Interface[edit]

3.1. Packaged applications

3.2. Package management

Description Wikipedia is often a good source for a description

Current version
<Provide the current version of the distribution and the date it was released.>

Derivatives
<Is this distribution a derivative? Provide the distribution it derives from> <If this is not a derivative, provide at least three distributions that are derived from it>

Licensing
<Provide the software license used by the distribution>

History
<Provide the name of the developer or group that created the distribution and, possibly, when it was started.> <Describe why it was developed, its target users, and its aims/goals.> <Feel free to provide other information you feel is important to know about the distribution>

Installation

<Describe the installation process. For example, is it done through a graphical interface or a command line? What was easy or difficult about the installation? Try comparing it with FreeBSD's installation. If possible, provide screenshots>

Interface

<What is the desktop environment used by the distribution (e.g., Gnome, KDE, XFCE)? If possible provide screenshots of the desktop, the menu bar, the file manager, and a running application's screen>

Packaged applications
<List the applications that are packaged with the distribution>

- Application 1
- Application 2
- Application 3

Package management
<List the preferred package management system for each distro.