Operating System Lab

Lab – 01

Objectives:

1. Installation of virtualization software like VMware or virtual box
2. Creating a virtual machine and installing some Linux distribution on it
3. Installing guest additions, and use of shared folder between host and guest OS
4. Understanding the Linux environment
5. Getting help using Linux man pages

Resources:

1. Video Lecture 00: https://youtu.be/ndl79-VDl50?list=PL7B2bn3G_wfBuJ_WtHADcXC44piWLRzr8
2. Video Lecture 01: https://youtu.be/6RaowbvmjTk?list=PL7B2bn3GwfBuJWtHADcXC44piWLRzr8
3. Video Lecture 02: https://www.youtube.com/watch?v=2EXade0bo
4. Video Lecture 03: Basic Shell Commands
5. Installation document: https://www.dropbox.com/s/biakgmihr0eazs9/User%20Manual.pdf?dl=0
6. Kali VM image : https://www.kali.org/get-kali/#kali-virtual-machines
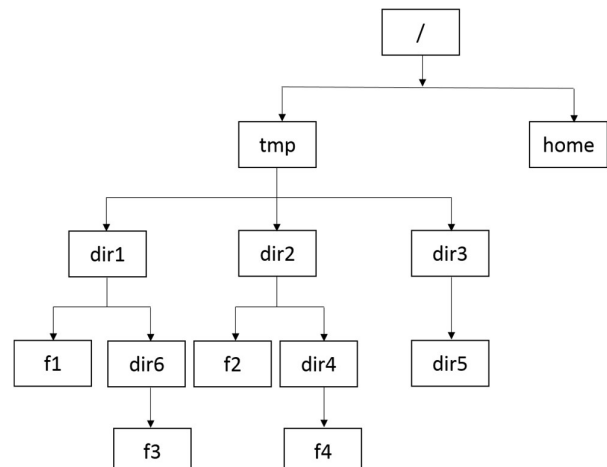
Virtual Machines

Task 01: Read the installation document and set up your VM unless your host OS is Linux.

Task 02: Set up the shared folder for your Guest and Host OS.

Linux Environment and File Hierarchy

Task 01: Referring to Figure 1.1 perform the following tasks:

a. Write down the **absolute** path to **f2**.

b. If your **pwd** is **dir3** then write down the **relative** path to **f1**.

c. If your **pwd** is **dir4** then write down the **relative** path to **f3**.

d. What is the **absolute** path to **f4**?

Task 02:

    a. What is the difference between these two prompts?

        ○ xxxx@Ubuntu:~$

        ○ xxxx@Ubuntu:~#

Task 03: Can your user do the privilege tasks such as deleting files in **/proc** directory.

Man Pages

Task 01: Use the Man pages on the following commands and try to figure out what they do.

1. Id
2. uname –r
3. whoami
4. ls –l
5. ifconfig

Task 02: Man pages are divided in seven sections. There is command called "**write**" and well known system call "**ssize_t write (int fd, const void *buf, size_t count);**" how can I open up their respective man pages?

Task 04: Using man command try to figure out what is inside the file **/etc/passwd.**