**EE463 Lab1** 

25/3/2023

# **Testing the Installed Environment:**

```
🚅 root@lamp: /root

☑ Using username "root".

Pre-authentication banner message from server:
End of banner message from server
root@192.168.56.101's password:
Welcome to Lamp, TurnKey GNU/Linux 16.0 (Debian 10/Buster)
 System information for Sat Mar 25 20:49:39 2023 - +03 (UTC+0300)
   System load: 0.07
                                  Memory usage: 54.7%
   Processes: 101
                                  Swap usage: 0.0%
   Usage of /: 13.9% of 16.61GB IP address for eth0: 192.168.56.101
   For Advanced commandline config run: confconsole
  For more info see: https://www.turnkeylinux.org/docs/confconsole
Linux lamp 4.19.0-8-amd64 #1 SMP Debian 4.19.98-1+deb10ul (2020-04-27) x86 64
Last login: Sat Mar 25 20:45:46 2023 from 192.168.56.1
root@lamp ~#
```

```
root@lamp ~# g++ add.c -o add
add.c:2:10: fatal error: studio.h: No such file or directory
#include <studio.h>

compilation terminated.
root@lamp ~# []
```

```
root@lamp ~# gcc add.c -o add

root@lamp ~# ./add 1076 764

a,b = -1729566655 -1729566650

c = 1840

root@lamp ~#
```

## **Linux Command Tutorial**

```
root@lamp ~# adduser mohab
Adding user `mohab' ...
Adding new group `mohab' (1000) ...
Adding new user `mohab' (1000) with group `mohab' ...
Creating home directory `/home/mohab' ...
Copying files from `/etc/skel' ...
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for mohab
Enter the new value, or press ENTER for the default
        Full Name []:
        Room Number []:
         Work Phone []:
         Home Phone []:
         Other []:
Is the information correct? [Y/n] Y
root@lamp ~#
```

#### **Tutorial 1:**

```
💤 mohab@lamp: /home/mohab
Using username "mohab".
mohab@192.168.56.101's password:
Welcome to Lamp, TurnKey GNU/Linux 16.0 (Debian 10/Buster)
  System information for Sat Mar 25 23:07:35 2023 - +03 (UTC+0300)
    System load: 0.04
                                     Memory usage: 56.1%
    Processes: 103
                                     Swap usage: 0.0%
    Usage of /: 13.9% of 16.61GB IP address for eth0: 192.168.56.101
    For Advanced commandline config run: confconsole
  For more info see: https://www.turnkeylinux.org/docs/confconsole
Linux lamp 4.19.0-8-amd64 #1 SMP Debian 4.19.98-1+deb10ul (2020-04-27) x86 64
Last login: Sat Mar 25 23:05:22 2023 from 192.168.56.1
mohab@lamp ~$ ls
add.c
mohab@lamp ~$ 1s -a
   .bash_history .bashrc .penv .profile.d .ssh .bash_logout .bashrc.d .profile .sdirs add.c
mohab@lamp ~$ mkdir unixstuff
mohab@lamp ~$ 1s
add.c unixstuff
mohab@lamp ~$ cd unixstuff
mohab@lamp ~/unixstuff$ ls
mohab@lamp ~/unixstuff$ mkdir backups
mohab@lamp ~/unixstuff$ ls
mohab@lamp ~/unixstuff$ ls -a
mohab@lamp ~/unixstuff$ cd .
mohab@lamp ~/unixstuff$ cd ..
mohab@lamp -$ pwd
/home/mohab
mohab@lamp ~$ ls unixstuff
mohab@lamp ~$ 1s backups
ls: cannot access 'backups': No such file or directory
mohab@lamp ~$ ls unixstuff/backups
mohab@lamp ~$ ls ~/unixstuff
mohab@lamp ~$ 1s ~
add.c unixstuff
mohab@lamp ~$ 1s ~/..
mohab@lamp ~$
```

### **Tutorial 2:**

### **Example 2.1 (Copying Files)**

```
mohab@lamp:/home/mohab/unixstuff — X

mohab@lamp ~$ cd ~/unixstuff$ cp /home/mohab/unixstuff/vol/examples/tutorial/science.txt .

mohab@lamp ~/unixstuff$ ls

backups science.txt vol

mohab@lamp ~/unixstuff$
```

#### Exercise 2a

```
mohab@lamp:/home/mohab/unixstuff

mohab@lamp ~/unixstuff$ touch science.bak
mohab@lamp ~/unixstuff$ 1s
backups science.bak science.txt vol
mohab@lamp ~/unixstuff$ cp /home/mohab/unixstuff/science.txt science.bak
mohab@lamp ~/unixstuff$
```

### Example 2.2 (Moving files)

```
mohab@lamp:/home/mohab/unixstuff — X

mohab@lamp ~/unixstuff$ mv science.bak backups/.

mohab@lamp ~/unixstuff$ ls

backups science.txt vol

mohab@lamp ~/unixstuff$ ls backups

science.bak

mohab@lamp ~/unixstuff$
```

#### **Example 2.3 (Removing files and directories)**

```
mohab@lamp:/home/mohab/unixstuff — X

mohab@lamp ~/unixstuff$ cp science.txt tempfile.txt

mohab@lamp ~/unixstuff$ ls

backups science.txt tempfile.txt

mohab@lamp ~/unixstuff$ rm tempfile.txt

mohab@lamp ~/unixstuff$ ls

backups science.txt vol

mohab@lamp ~/unixstuff$ ls
```

## Exercise 2b

```
mohab@lamp:/home/mohab/unixstuff

mohab@lamp ~/unixstuff$ mkdir tempstuff
mohab@lamp ~/unixstuff$ ls
backups science.txt tempstuff
mohab@lamp ~/unixstuff$ rndir tempstuff
mohab@lamp ~/unixstuff$ ls
backups science.txt vol
mohab@lamp ~/unixstuff$
```