**Name : Muhammad Hamza Iqbal**
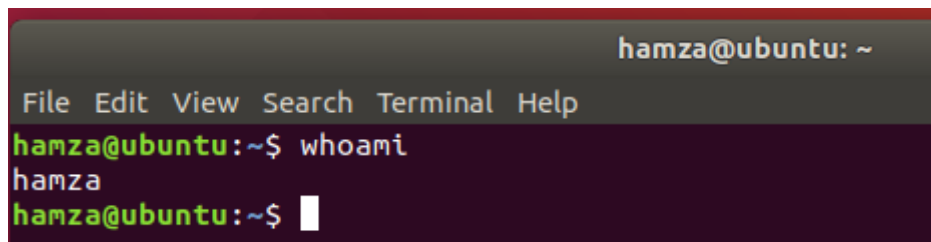
**Roll No: BSEF17A509**

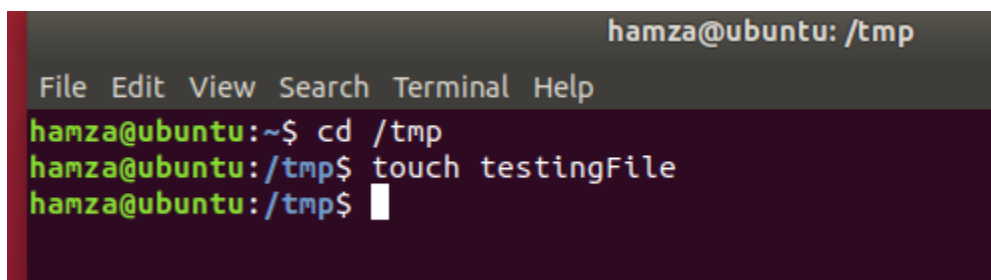# OS LAB – 01

## Basic Shell Commands:

**1-** **Whoami   is used to display user name**



**2- Create file in /tmp**



**3- To check info about file ls –l is use – in the beginning show it's a file.**

**4- rm is use to delete a file while rmdir is use to delete an empty directory.**

```
                              hamza@ubuntu: ~

 File  Edit  View  Search  Terminal  Help
hamza@ubuntu:~$ ls
Desktop      Downloads           Music       Public      tmpfile      Videos
Documents    examples.desktop  Pictures    Templates   tmpfolder
hamza@ubuntu:~$ rm tmpfile
hamza@ubuntu:~$ rm tmpfolder/
rm: cannot remove 'tmpfolder/': Is a directory
hamza@ubuntu:~$ rmdir tmpfolder/
hamza@ubuntu:~$ ls
Desktop      Downloads           Music       Public      Videos
Documents    examples.desktop  Pictures    Templates
hamza@ubuntu:~$
```

**5- cd /home  is use to go back in home directory directly.**

```
                         hamza@ubuntu: /home

 File  Edit  View  Search  Terminal  Help
hamza@ubuntu:~$ cd /home
hamza@ubuntu:/home$
```

**6- mv "tryit&" "tryit_now" use to rename file.**

```
                              hamza@ubuntu: ~

 File  Edit  View  Search  Terminal  Help
hamza@ubuntu:~$ touch "tryit&"
hamza@ubuntu:~$ ls
 Desktop      Downloads           Music       Public      'tryit&'
 Documents    examples.desktop  Pictures    Templates   Videos
hamza@ubuntu:~$ mv "tryit&" "tryit_now"
hamza@ubuntu:~$ ls
Desktop      Downloads           Music       Public      tryit_now
Documents    examples.desktop  Pictures    Templates   Videos
hamza@ubuntu:~$
```

**7- alias myclear="clear" use to give another name to a command.**

```
                        hamza@ubuntu: ~

File  Edit  View  Search  Terminal  Help
hamza@ubuntu:~$ alias myclear="clear"
hamza@ubuntu:~$ █
```

**8- (a)- output will be when u run cls at last then it display all directories in pwd.**
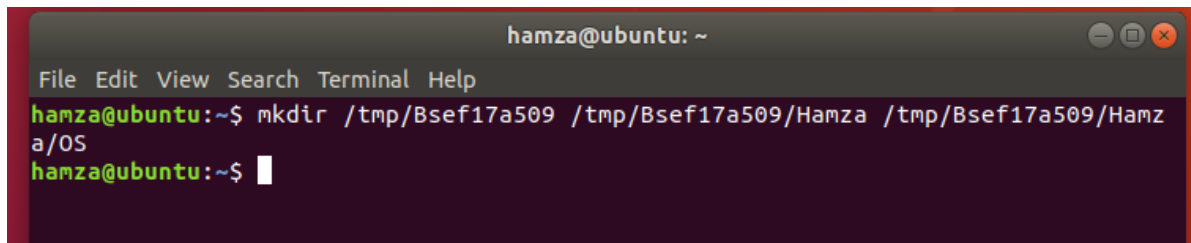
```
                        hamza@ubuntu: ~

File  Edit  View  Search  Terminal  Help
hamza@ubuntu:~$ alias cls=clear
hamza@ubuntu:~$ cls
hamza@ubuntu:~$ alias cls=ls
hamza@ubuntu:~$ cls
Desktop     Downloads            Music       Public      Videos
Documents   examples.desktop  Pictures  Templates
hamza@ubuntu:~$ █
```

**8- (b)-Output will be can't create directory with same name already exsit.**

```
                        hamza@ubuntu: ~

File  Edit  View  Search  Terminal  Help
hamza@ubuntu:~$ mkdir d1
hamza@ubuntu:~$ cd d1
hamza@ubuntu:~/d1$ touch f1 f2
hamza@ubuntu:~/d1$ touch f1
hamza@ubuntu:~/d1$ cd
hamza@ubuntu:~$ mkdir d1
mkdir: cannot create directory 'd1': File exists
hamza@ubuntu:~$ █
```
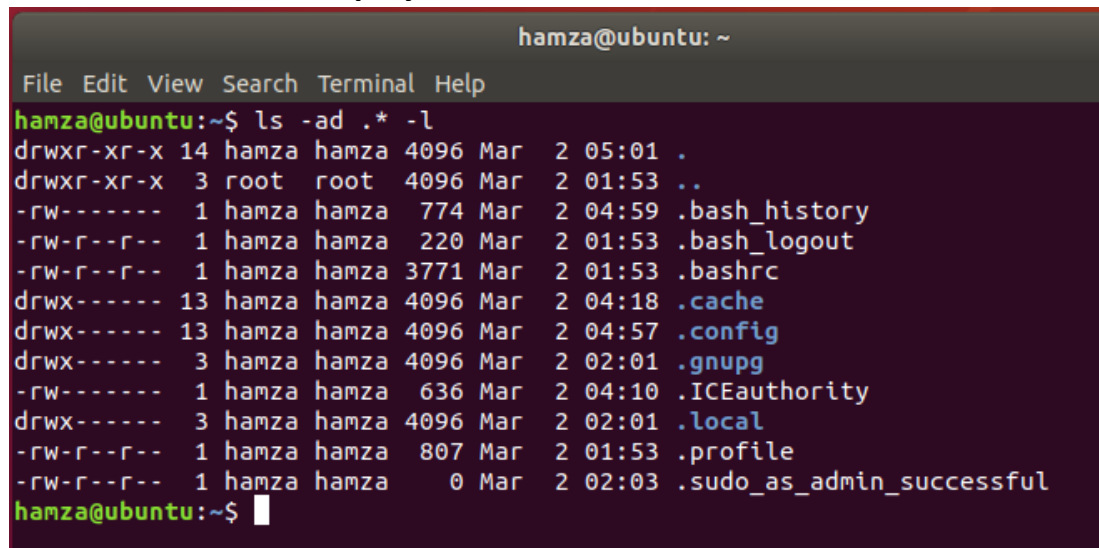
# QUESTIONS

1- 'mkdir /tmp/Bsef17a509  /tmp/Bsef17a509/Hamza
   /tmp/Bsef17a509/Hamza/OS' this single command is use to create
   three directories.



2- ls –ad .* -l is use to display hidden files with details.



3- 1- rmdir /tmp/Bsef17a509/Hamza/OS/   /tmp/bsef17a509/Hamza/
   /tmp/Bsef17a509/
   Or
   2- rm –r /tmp/Bsef17a509
   These two method can be used to delete directories with
   subdirectories.

**4-** **cat > testFile is use to create file as well as allow to write.**

**cat -n testFil is use to display text with lines no.**

## 5- mv "testFile" "test@file!" use to rename file.



## 6- tail -2 test@file! Is use to display last 2 lines.



## 7- alias unleash="ls –ad .* -l" now unleash can be use to display hidden files with details.

**8-  I use man command-name to display command details.**

**9-  Type type is use to display type command type if it's builtin
then it's mean it's internal command.**

```
                          hamza@ubuntu: ~

 File  Edit  View  Search  Terminal  Help
hamza@ubuntu:~$ type type
type is a shell builtin
hamza@ubuntu:~$ 
```

**10-      rm –r directory-name can be use to remove directory.**

```
                          hamza@ubuntu: ~

 File  Edit  View  Search  Terminal  Help
hamza@ubuntu:~$ mkdir tmpDir
hamza@ubuntu:~$ ls
Desktop     Downloads          Music      Public      tmpDir
Documents   examples.desktop   Pictures   Templates   Videos
hamza@ubuntu:~$ rm -r tmpDir/
hamza@ubuntu:~$ ls
Desktop     Downloads          Music      Public      Videos
Documents   examples.desktop   Pictures   Templates
hamza@ubuntu:~$ 
```

# Absolute/Relative Path

1- **mkdir /home/dillawer/reports use to make directory in dillawer.**

```
                                    root@ubuntu: /home

 File  Edit  View  Search  Terminal  Help
root@ubuntu:/home# mkdir /home/dilwaer/reports
root@ubuntu:/home#
```

2- **sudo mkdir /home/abdul is use to make directory abdul in home.**

```
                                    root@ubuntu: /home/dilwaer/reports

 File  Edit  View  Search  Terminal  Help
root@ubuntu:/home/dilwaer/reports# mkdir /home/abdul
root@ubuntu:/home/dilwaer/reports#
```

3- **touch ../../abdul/file1 is use to make file1 in abdul pwd reports.**

```
                                    root@ubuntu: /home/dilwaer/reports

 File  Edit  View  Search  Terminal  Help
root@ubuntu:/home/dilwaer/reports# touch ../../abdul/file1
root@ubuntu:/home/dilwaer/reports#
```

4- **mkdir ../staff/arif ../staff/rauf use to make directories in staff using relative path pwd abdul.**

```
                                    root@ubuntu: /home/abdul

 File  Edit  View  Search  Terminal  Help
root@ubuntu:/home/abdul# mkdir ../staff/arif ../staff/rauf
root@ubuntu:/home/abdul#
```

5- **touch arif/file2 rauf/file3 use to make file2 and file3 in arif and raud pwd staff.**

```
                                    root@ubuntu: /home/staff

 File  Edit  View  Search  Terminal  Help
root@ubuntu:/home/staff# touch arif/file2 rauf/file3
root@ubuntu:/home/staff#
```

**6- cp /home/staff/arif/file2   /home/abdul/**
   **cp /home/staff/rauf/file3   /home/abdul/**
   **use to copy file2 and 3 in abdul using absolute path.**

```
                    root@ubuntu: /home/staff

 File  Edit  View  Search  Terminal  Help
 root@ubuntu:/home/staff# cp /home/staff/arif/file2 /home/abdul/
 root@ubuntu:/home/staff# cp /home/staff/rauf/file3 /home/abdul/
 root@ubuntu:/home/staff#
```

**7- cp –r ../staff/  ../dilwaer/newdir/ use to copy staff directory with**
   **it's subdirectories to dilawer/newdir.**

```
                    root@ubuntu: /home/abdul

 File  Edit  View  Search  Terminal  Help
 root@ubuntu:/home/abdul# cp -r ../staff/ ../dilwaer/newdir/
 root@ubuntu:/home/abdul#
```

**8- rm –r ../../staff use to remove staff with it's subdirectories pwd**
   **dilwaer/newdir.**

```
                    root@ubuntu: /home/dilwaer/newdir

 File  Edit  View  Search  Terminal  Help
 root@ubuntu:/home/dilwaer/newdir# rm -r ../../staff/
 root@ubuntu:/home/dilwaer/newdir#
```

 **9-mv staff/arif/file2  staff/arif/refile2 rename file2 with refile2 pwd**

 **newdir.**

```
              root@ubuntu: /home/dilwaer/newdir/staff/arif

 File  Edit  View  Search  Terminal  Help
 root@ubuntu:/home/dilwaer/newdir# mv staff/arif/file2 staff/arif/refile2
 root@ubuntu:/home/dilwaer/newdir# cd staff/arif/
 root@ubuntu:/home/dilwaer/newdir/staff/arif# ls
 refile2
 root@ubuntu:/home/dilwaer/newdir/staff/arif#
```