

Q1) Create a directory "exercise" inside your home directory and create nested(dir1/dir2/dir3) directory structure inside "exercise" with single command.

```
sudo mkdir -p exercise/dir1/dir2/dir3
```

Q2) Create two empty files inside dir2 directory: emptyFile1, emptyFile2 in single command

```
sudo touch emptyFile1 emptyFile2
```

Q3) Create one file file1.txt containing text "hello world" and save it.

```
cat > hello.txt  
hello World
```

Q4) Find a "passwd" file using find command inside /etc. copy this files as passwd_copy and then rename this file as passwd_backup.

```
find passwd  
cp passwd "/home/himanshuagrawal/Desktop/passwd_copy"  
mv passwd_copy passwd_backup
```

Q5) Try reading passwd_backup file in multiple tools: less,more,cat,strings etc and find the difference in their usage.

```
head passwd_backup -> Prints first 10 lines  
tail passwd_backup -> Prints last 10 lines  
more passwd_backup -> Prints major part and then reloads on scrolling  
less passwd_backup -> Prints less part and then reloads on scrolling
```

Q6) Find out the number of line in password_backup containing "/bin/false".

```
grep -c "/bin/false" passwd_backup
```

Q7) Get the first 5 lines of a file "password_backup" and Redirect the output of the above commands into file "output". Also, get the lines 6-10 from the above file.

```
head -n 5 passwd_backup > output  
head output | tail -n 4
```

Q8) Create a "test" user, create its password and find out its uid and gid.

```
sudo adduser test  
id -u test  
id -g test
```

Q9) Change the timestamp of emptyFile1, emptyFile2 which exist in dir2

```
sudo touch -t 202312291235 emptyFile1 emptyFile2
```

Q10) Create alias with your name so that it creates a file as "/tmp/aliastesting".

```
alias create='sudo mkdir -p "/tmp/aliastesting"'
```

Q11) Edit ~/.bashrc file such that when you change to "test" user it should clear the screen and print "Welcome".

```
find bashrc in user/home dir  
nano .bashrc  
echo "Welcome"
```

Q12) Compress "output" and "password_backup" files into a tar ball. List the files present inside the tar created.

```
tar cvf 'out.tar' output.txt passwd_backup.txt
```

Q14) How to get help of commands usages.

man ls

man cd

man man

nano --help

gedit --help

head --help