COMSATS UNIVERSITY ISLAMABAD ATTOCK CAMPUS

Lab Report 1 :

Operating System

Submitted to : Sir Fayyaz Ali

Group Members	Muaaz Shoaib FA20-BCS-074 Shahzeb Shaheen FA20-BCS-040

Rubrics Assessment Sheet for Operating System

Lab #:	**Lab no 1**
Lab Title:	**What is Linux and its Commands**
Submitted by:	

Names Muaaz Shoaib Shahzeb Shaheen	Registration FA20-BCS-074 FA20-BCS-040

Rubrics name & number		Marks	
		ln-Lab	Post lab
Engineering Knowledge	*R2:*Use of Engineering Knowledge and follow Experiment Procedures: *Ability to follow experimental procedure,control variables,and record Procedural steps on lab report.*		
Problem Analysis	*R6: Experimental Data Analysis :* *Ability to interept findings,compare them to values in the literature,identify weaknesses and limitations*		
Design	*RS: Best Coding Staudards:* *Ability to follow the coding standards and programming practices*		
Modem Tools Usage	*R9: Undcrsta11d Tools: Ability to describe and explain the principles behind applicability of engineering tools.*		
Individual and Teamwork	*R9:Management of Team Work:* *Ability to appreciate, understand and work multidisciplinary team members*		

Rubrics #	R2	R6	RS	R9	Rl3
Jn -Lab					
Post- Lab					

Description :

Linux :

Its an Operating System used for various Purposes.

Characteristics :

It is Free

It is Customizable.

It is Written in C Language which is highly portable

Virtual Box :

It is used to host the Operating System .A virtual Environment is created by it from which we can affectively used this OS.

Q1

a. Log in.

b. Log out.

c. Log in again. Open a terminal window, to start a shell.

d. Exit from the shell; the terminal window will close.

e. Start another shell. Enter each of the following commands in turn.

i. date

ii. whoami
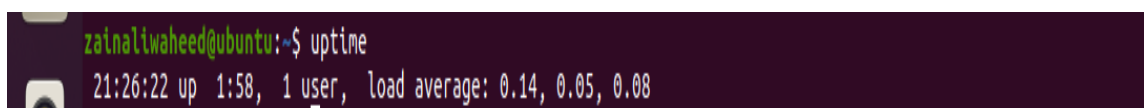
iii. hostname

iv. uname
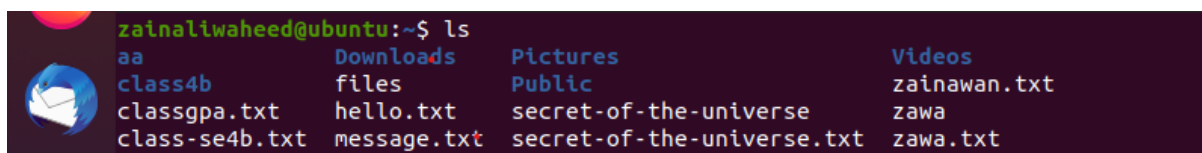
v. uptime

Q2 :

a. Use the ls command to see if you have any files.

b. Create a new file using the cat command as follows:

$ cat > hello.txt Hello world!

This is a text file.

```
zainaliwaheed@ubuntu:~$ cat > hello.txt
Hello World!
This is a text file.
```

c. Press Enter at the end of the last line, then Ctrl+D to denote the end of the file.

```
zainaliwaheed@ubuntu:~$ cat > hello.txt
Hello World!
This is a text file.
```

d. Use ls again to verify that the new file exists.

```
zainaliwaheed@ubuntu:~$ ls
aa              Downloads    Pictures                    Videos
class4b         files        Public                      zainawan.txt
classgpa.txt    hello.txt    secret-of-the-universe      zawa
class-se4b.txt  message.txt  secret-of-the-universe.txt  zawa.txt
Desktop         Music        sq
Documents       newdata.txt  Templates
```

e. Display the contents of the file.

```
zainaliwaheed@ubuntu:~$ cat hello.txt
Hello World!
This is a text file.
```

f. Display the file again, but use the cursor keys to execute the same command again without having to retype it.

```
zainaliwaheed@ubuntu:~$ cat hello.txt
Hello World!
This is a text file.
zainaliwaheed@ubuntu:~$ 
```

Q3 :

a.Create a second file. Call it secret-of-the-universe, and put in whatever content you deem appropriate.

```
zainaliwaheed@ubuntu:~$ cat > secret-of-the-universe
i am zain ali
```

b. Check its creation with ls.

```
zainaliwaheed@ubuntu:~$ ls
aa             Downloads    Pictures                   Videos
class4b        files        Public                     zainawan.txt
classgpa.txt   hello.txt    secret-of-the-universe     zawa
class-se4b.txt message.txt  secret-of-the-universe.txt zawa.txt
Desktop        Music        sq
Documents      newdata.txt  Templates
```

c. Display the contents of this file. Minimize the typing needed to do this:

i. Scroll back through the command history to the command you used to create the file.

ii. Change that command to display secret-of-the-universe instead of creating it.

```
zainaliwaheed@ubuntu:~$ cat secret-of-the-universe
i am zain ali
```

Q4 :

After each of the following steps, use ls and cat to verify what has happened.

a. **Copy secret-of-the-universe to a new file called answer.txt. Use Tab to avoid typing the existing file's name in full.**

```
zainaliwaheed@ubuntu:~$ cp secret-of-the-universe answer.txt
```

b. **Now copy hello.txt to answer.txt. What's happened now?**

```
zainaliwaheed@ubuntu:~$ cp hello.txt answer.txt
```

c. **Delete the original file, hello.txt.**

```
zainaliwaheed@ubuntu:~$ rm hello.txt
```

d. **Rename answer.txt to message.**

```
zainaliwaheed@ubuntu:~$ mv answer.txt message
```

e. **Try asking rm to delete a file called missing. What happens?**

```
zainaliwaheed@ubuntu:~$ rm missing.txt
rm: cannot remove 'missing.txt': No such file or directory
```

f. Try copying secret-of-the-universe again, but don't specify a filename to which to copy. What happens now?

```
zainaliwaheed@ubuntu:~$ cp secret-of-the-universe
cp: missing destination file operand after 'secret-of-the-universe'
Try 'cp --help' for more information.
zainaliwaheed@ubuntu:~$
```