WEEK 1

1: Write shell commands for the following:

(i) To create a subdirectory in your home directory having 2 subdirectories.

```
File  Edit  View  Search  Terminal  Help
student@dslab:~$ bash
student@dslab:~$ mkdir main
student@dslab:~$ cd main
student@dslab:~/main$ mkdir sub1 sub2
student@dslab:~/main$ ls
sub1   sub2
student@dslab:~/main$ 
```

(ii) In first subdirectory, create 3 different files with different content in each of them.

```
$ bash
student@dslab:~$ cd main
student@dslab:~/main$ cd sub1
student@dslab:~/main/sub1$ cat>fa.txt
Content of file 1student@dslab:~/main/sub1$ cat fa.txt
Content of file 1student@dslab:~/main/sub1$ cat>fb.txt
Content of file 2
student@dslab:~/main/sub1$ cat fb.txt
Content of file 2
student@dslab:~/main/sub1$ cat>fc.txt
Content of file 3
student@dslab:~/main/sub1$ cat fc.txt
Content of file 3
student@dslab:~/main/sub1$ 
```

(iii) Copy the first file from the first subdirectory to the second subdirectory.

```
student@dslab:~/main/sub1$ cp fa.txt /home/student/main/sub2
student@dslab:~/main/sub1$ cd /home/student/main/sub2
student@dslab:~/main/sub2$ ls
fa.txt
student@dslab:~/main/sub2$ ▯
```

(iv) Create one or more file in the second subdirectory which has the output of the number of users and number of files.

```
student@dslab:~/main/sub2$ cat>anewfile.txt
student@dslab:~/main/sub2$ cat>A.txt
student@dslab:~/main/sub2$ ls
anewfile.txt  A.txt   fa.txt
student@dslab:~/main/sub2$ who |wc -l>>anewfile.txt
student@dslab:~/main/sub2$ ls |wc -l>>anewfile.txt
student@dslab:~/main/sub2$ cat anewfile.txt
1
3
student@dslab:~/main/sub2$ ▯
```

(v) To list all the files which starts with a or A.

```
student@dslab:~/main/sub2$ ls [aA]*
anewfile.txt   A.txt
student@dslab:~/main/sub2$ ▯
```

(vi) To count the number of file in the current directory.

```
student@dslab:~/main/sub2$ ls -l |grep "^" |wc -l
4
```

(vii) Display the output if the compilation of a program succeeds.

//sample.c

```c
#include <stdio.h>
int main() {
    printf("\n Program for OSTL by 190905513");
    return 0;
}
```

```
student@dslab:~/main$ gcc /home/student/main/sample.c -o sample
student@dslab:~/main$ ./sample

Program for OSTL by 190905513student@dslab:~/main$ ▯
```

(viii) Count the number of lines in an input file.

```
student@dslab:~/main$ cd sub1
student@dslab:~/main/sub1$ wc -l fa.txt
0 fa.txt
student@dslab:~/main/sub1$ wc -l fb.txt
1 fb.txt
student@dslab:~/main/sub1$ wc -l fc.txt
1 fc.txt
student@dslab:~/main/sub1$ ▯
```

2: Execute the following command in sequence:

(i) $date

```
student@dslab:~/main/sub1$ date
Wed Feb 10 14:36:21 IST 2021
student@dslab:~/main/sub1$
```

(ii) $ls

```
student@dslab:~/main/sub1$ ls
f11.txt   fa.txt   fb.txt   fc.txt   file1.txt
student@dslab:~/main/sub1$
```

(iii) $pwd

```
student@dslab:~/main/sub1$ pwd
/home/student/main/sub1
student@dslab:~/main/sub1$
```