

USP Lab test 1 Write-up

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1BM18CS036

5A-2

Program 5

USP Lab Test 1

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Program 5 :-

- a) Write a shell script to replace occurrences of "computer" with "setupmac" in a given file using for loop

```
=> #!/bin/sh
printf "Enter file path: "
read path
touch temp.txt
repl="setupmac"
for w in `cat $path`
do
    case $w in
        "computer") printf "$repl" ;;
        *) printf "$w " $
    esac
done >> temp.txt
cat $path
cat temp.txt > $path
rm -rf temp.txt
```

```
Harshit(1BM18CS036):~temp$ cat test.txt
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Harshit(1BM18CS036):~temp$ cat test.txt | grep computer
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Harshit(1BM18CS036):~temp$ sh q_5a.sh
Enter file path: test.txt
Harshit(1BM18CS036):~temp$ cat test.txt | grep computer
Harshit(1BM18CS036):~temp$ cat test.txt | grep retupmoc
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Harshit(1BM18CS036):~temp$
```

b) Write shell script to count number of files & directories in current directory.

→ #!/bin/sh

dirs=\$(ls -lp | grep '[\']\$' | wc -l)

files=\$(ls -lp | grep -v '^[td]\$' | wc -l)

echo "Number of directories :"\$dirs

echo "Number of files :"\$files

Explanation

ls → this command list all files & folders one per line

grep → output of ls is piped to grep, which filters files & folders

grep -v '^[td]'

⇒ -v means negate
^[td] → lines starting with t & d
are not files, hence ignore them

grep '[\']\$'

⇒ [\']\$ lines ending with a ' character are folders.

\ , \ is used to escape the ' character.

```
Harshit(1BM18CS036):~temp$ ls -l
total 28
-rw-rw-r-- 1 wave wave 740 Nov 17 14:52 emp.lst
-rw-rw-r-- 1 wave wave 355 Nov 19 16:11 q_5a_change.sh
-rw-rw-r-- 1 wave wave 294 Nov 19 15:43 q_5a.sh
-rw-rw-r-- 1 wave wave 167 Nov 19 14:54 q_5b.sh
-rw-rw-r-- 1 wave wave 0 Nov 18 20:22 temp.sh
drwxrwxr-x 2 wave wave 4096 Nov 19 16:16 test
-rw-rw-r-- 1 wave wave 9 Nov 19 15:46 test1.txt
-rw-rw-r-- 1 wave wave 628 Nov 19 16:10 test.txt
Harshit(1BM18CS036):~temp$ sh q_5b.sh
Number of directories : 1
Number of files : 7
Harshit(1BM18CS036):~temp$
```