ABHISHEK SHARMA
CS THIRD YEAR
SECTION : "I"
ROLL NO.: 01
ENROLLMENT NO.: 12019009001127

OPERATING SYSTEMS LABORATORY

DAY 4

ASSIGNMENT 4

DATE : 09.08.2021
PLATFORM USED : UBUNTU 20.04 LTS

UNIVERSITY OF ENGINEERING & MANAGEMENT, KOLKATA
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

1. Search for vowels in a file .

```
abhisheks008@LAPTOP-9RGGUF05:~$ grep -i [aeiou] Name
Abhishek
Sayan
Nabarun
Digbijoy
Udayan
Raktim
```

2. Search for consonants in a file.

```
abhisheks008@LAPTOP-9RGGUF05:~$ grep -i [^aeiou] Name
Abhishek
Sayan
Nabarun
Digbijoy
Udayan
Raktim
```

3. Create a file “states”.

```
abhisheks008@LAPTOP-9RGGUF05:~$ cat >States
Assam is the state from north east.
West Bengal is having the major border with bangladesh.
Andhra is having a rich culture.
Dance form of Manipur is Manipuri
abhisheks008@LAPTOP-9RGGUF05:~$ cat States
Assam is the state from north east.
West Bengal is having the major border with bangladesh.
Andhra is having a rich culture.
Dance form of Manipur is Manipuri
```

4. Display all lines that start with “A” in “state”.

```
abhisheks008@LAPTOP-9RGGUF05:~$ grep -i ^'A' States
Assam is the state from north east.
Andhra is having a rich culture.
```

5. Display all lines that ends with “i” in “state”.

```
abhisheks008@LAPTOP-9RGGUF05:~$ grep -i 'i$' States
Dance form of Manipur is Manipuri
```

6. Print the output of 100/3 (after point there must be 2 numbers) .

```
abhisheks008@LAPTOP-9RGGUF05:~$ echo "scale=2; 100/3" | bc
33.33
```

7. Print the number which came after 10 using bc command(use increment operator).

```
abhisheks008@LAPTOP-9RGGUF05:~$ echo "var=10; ++var"|bc
11
```

8. Find the binary equivalent of 10 .

```
abhisheks008@LAPTOP-9RGGUF05:~$ echo "obase = 2; 10" | bc
1010
```

9. Find the decimal equivalent of 1101001.

```
abhisheks008@LAPTOP-9RGGUF05:~$ echo "ibase = 2; 1101001" | bc
105
```

10. Create a file “name”. Identify the lines that are not duplicate.

```
abhisheks008@LAPTOP-9RGGUF05:~$ cat Name
Abhishek
Udayan
Digbijoy
Sayan
Nabarun
Abhishek
Sayan
abhisheks008@LAPTOP-9RGGUF05:~$ sort Name | uniq -d
Abhishek
Sayan
```

11. Print the number of duplicate lines.

```
abhisheks008@LAPTOP-9RGGUF05:~$ sort Name | uniq -d -c
      2 Abhishek
      2 Sayan
```

12. Create two files and then print the difference between those two files.

```
abhisheks008@LAPTOP-9RGGUF05:~$ cat >file1
This
is
the
1st
file
abhisheks008@LAPTOP-9RGGUF05:~$ cat >file2
This
is
the
2nd
file
abhisheks008@LAPTOP-9RGGUF05:~$ cmp file1 file2
file1 file2 differ: byte 13, line 4
```

13. Write two lines about your OS lab class in two different files.

```
abhisheks008@LAPTOP-9RGGUF05:~$ cat >os1
This
is
Operating
Systems
Lab.
abhisheks008@LAPTOP-9RGGUF05:~$ cat >os2
This
is
Operating
Systems
Lab
```

14. Is these two files are identical ?

```
abhisheks008@LAPTOP-9RGGUF05:~$ cat >os1
This
is
Operating
Systems
Lab.
abhisheks008@LAPTOP-9RGGUF05:~$ cat >os2
This
is
Operating
Systems
Lab
abhisheks008@LAPTOP-9RGGUF05:~$ cmp os1 os2
os1 os2 differ: byte 30, line 5
```

```
abhisheks008@LAPTOP-9RGGUF05:~$ cat >os2
This
is
Operating
Systems
Lab.
abhisheks008@LAPTOP-9RGGUF05:~$ cmp os1 os2
abhisheks008@LAPTOP-9RGGUF05:~$ cat os1
This
is
Operating
Systems
Lab.
abhisheks008@LAPTOP-9RGGUF05:~$ cat os2
This
is
Operating
Systems
Lab.
abhisheks008@LAPTOP-9RGGUF05:~$ cmp os1 os2
```

15. Print the version of current kernel in your machine.

```
abhisheks008@LAPTOP-9RGGUF05:~$ uname -a
Linux LAPTOP-9RGGUF05 4.4.0-19041-Microsoft #488-Microsoft Mon Sep 01 13:43:00 PST 2020 x86_64 x86_64 x86_64 GNU/Linux
abhisheks008@LAPTOP-9RGGUF05:~$ uname -s
Linux
abhisheks008@LAPTOP-9RGGUF05:~$ uname -n
LAPTOP-9RGGUF05
abhisheks008@LAPTOP-9RGGUF05:~$ uname -r
4.4.0-19041-Microsoft
abhisheks008@LAPTOP-9RGGUF05:~$ uname -v
#488-Microsoft Mon Sep 01 13:43:00 PST 2020
```

```
abhisheks008@LAPTOP-9RGGUF05:~$ uname -v
#488-Microsoft Mon Sep 01 13:43:00 PST 2020
```

---- o ----