## 1) Commands pwd, cd, mkdir, touch, more, less, head, tail, date, cal, rmdir, mv, rm, cp, echo, cls .

1. ls [root@localhost ~]# ls
2. mkdir [root@localhost ~]# mkdir nilesh
3. pwd [root@localhost ~]# pwd
   /root
4. cd [root@localhost ~]# cd nilesh
   [root@localhost nilesh]# pwd
   /root/nilesh
5. cal [root@localhost nilesh]# cal September 2024
   Su Mo Tu We Th Fr Sa
   1 2 3 4 5 6 7
   8 9 10 11 12 13 14
   15 16 17 18 19 20 21
   22 23 24 25 26 27 28
   29 30

6. date [root@localhost nilesh]# date
   Wed Sep 25 06:30:05 PDT 2024
7. touch [root@localhost nilesh]# touch a.txt
   [root@localhost nilesh]# touch b.txt
8. cat [root@localhost nilesh]# cat>a.txt
   1
   2
   3
   4
   5
   6
   7
   8
   9
   10
   11
   12
   13
   14
   15
   16
   17
   18
   19
   20



9. more [root@localhost nilesh]# more a.txt
   1
   2

3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20

10. head [root@localhost nilesh]# head a.txt
1
2
3
4
5
6
7
8
9
10

11. tail [root@localhost nilesh]# tail a.txt
11
12
13
14
15
16
17
18
19
20

12. less [root@localhost nilesh]# less a.txt
7
8
9
10
11
12



13

14
15
16
17
18
19
20

13. cp [root@localhost nilesh]# cp a.txt b.txt
    [root@localhost nilesh]# ls a.txt b.txt nilesh
    [root@localhost nilesh]# pwd
    /root/nilesh
    [root@localhost nilesh]# more b.txt
    1
    2
    3
    4
    5
    6
    7
    8
    9
    10
    11
    12
    13
    14
    15
    16
    17
    18
    19
    20
14. rm [root@localhost nilesh]# rm b.txt rm: remove regular file `b.txt'? yes [root@localhost nilesh]# more b.txt b.txt: No such file or directory [root@localhost nilesh]# ls a.txt nilesh
15. rmdir [root@localhost nilesh]# rmdir nilesh [root@localhost nilesh]# ls a.txt
16. mv [root@localhost nilesh]# mv a.txt c.txt [root@localhost nilesh]# ls c.txt
17. echo [root@localhost nilesh]# echo "my self is nilesh shimpi" my self is nilesh Shimpi

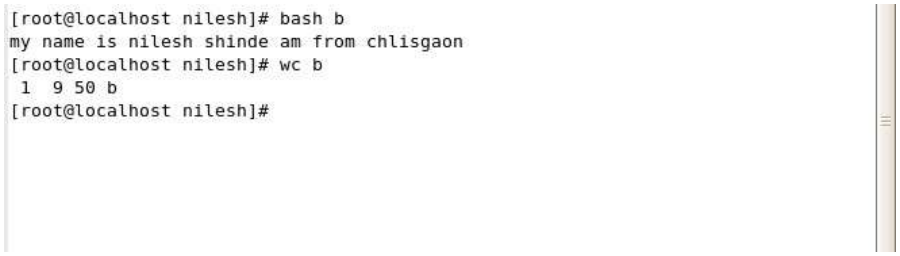
## 2) Demonstration of cat and ls commands with options.

1. ls
```
[root@localhost ~]# ls
[root@localhost ~]# pwd
/root
[root@localhost ~]# mkdir nilesh
[root@localhost ~]# cd
[root@localhost ~]# cd nilesh
[root@localhost nilesh]# ls
```
2. cat
```
[root@localhost nilesh]# cat>a.txt
Demonstration of cat and ls commands with options Demonstration
of cat and ls commands.
[root@localhost nilesh]# cat a.txt
Demonstration of cat and ls commands with options Demonstration
of cat and ls commands.
```

**3) Write a Program for word count using shell scripting Linux. Using shell**

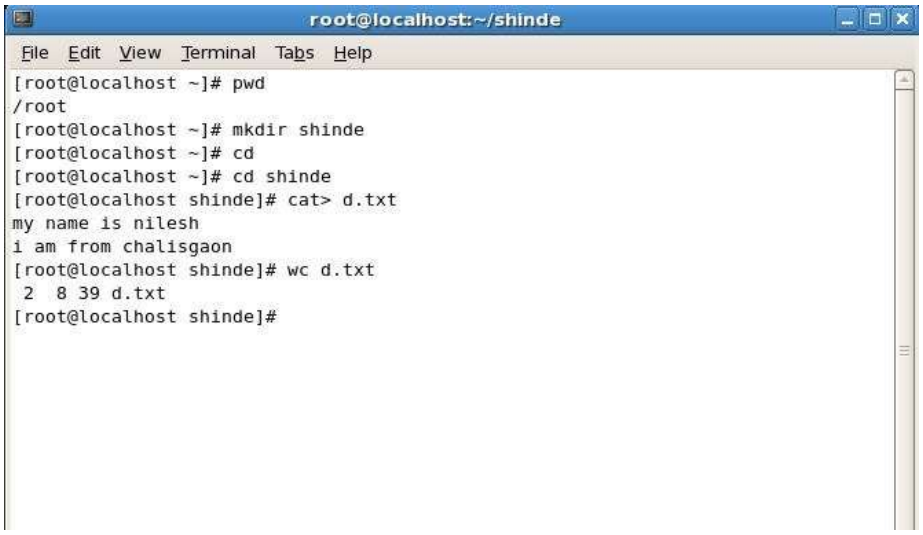
```
[root@localhost ~]# ls nilesh
[root@localhost ~]# pwd
/root
[root@localhost ~]# mkdir nilesh
[root@localhost ~]# cd nilesh
[root@localhost nilesh]# vi b
```


**Output :-**

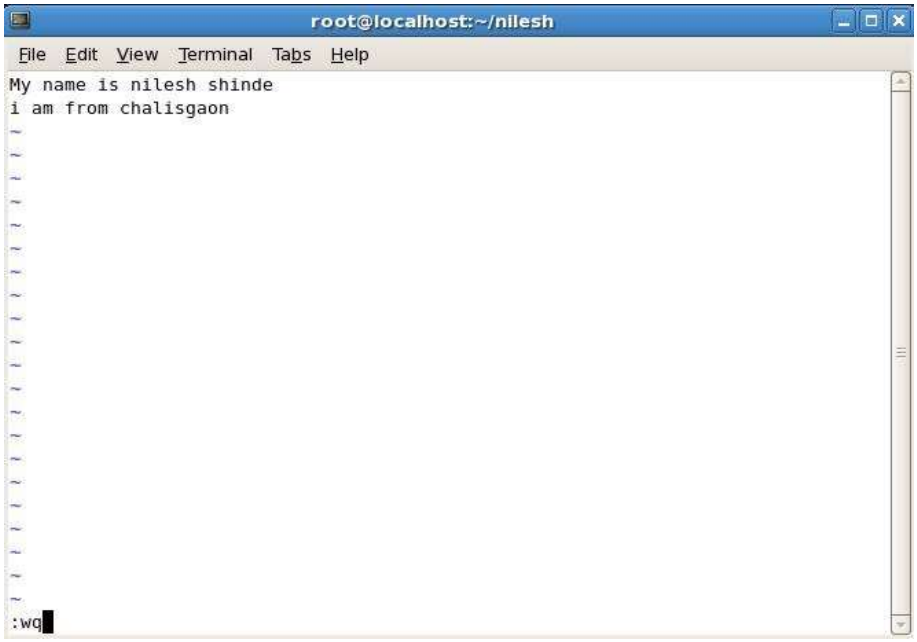



**Write a Program for word count using Without Shell.**

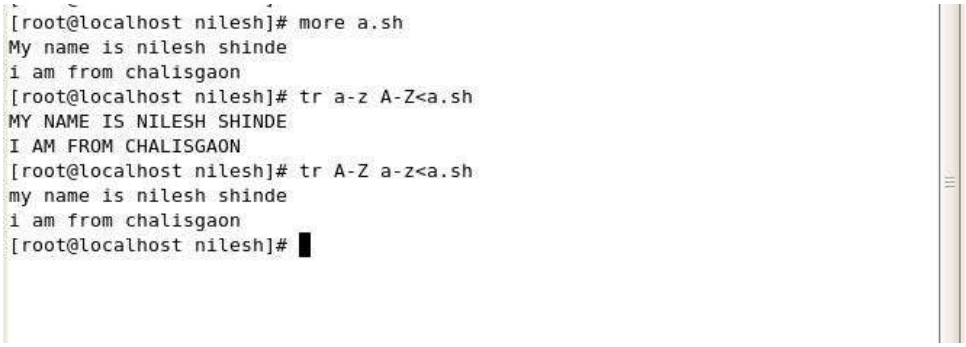
**4) Program for case conversion (upper case) using shell scripting Linux.**



```
[root@localhost ~]# ls
[root@localhost ~]# pwd
/root
[root@localhost ~]# mkdir nilesh
[root@localhost ~]# cd
[root@localhost ~]# cd nilesh
[root@localhost nilesh]# vi a.sh
```

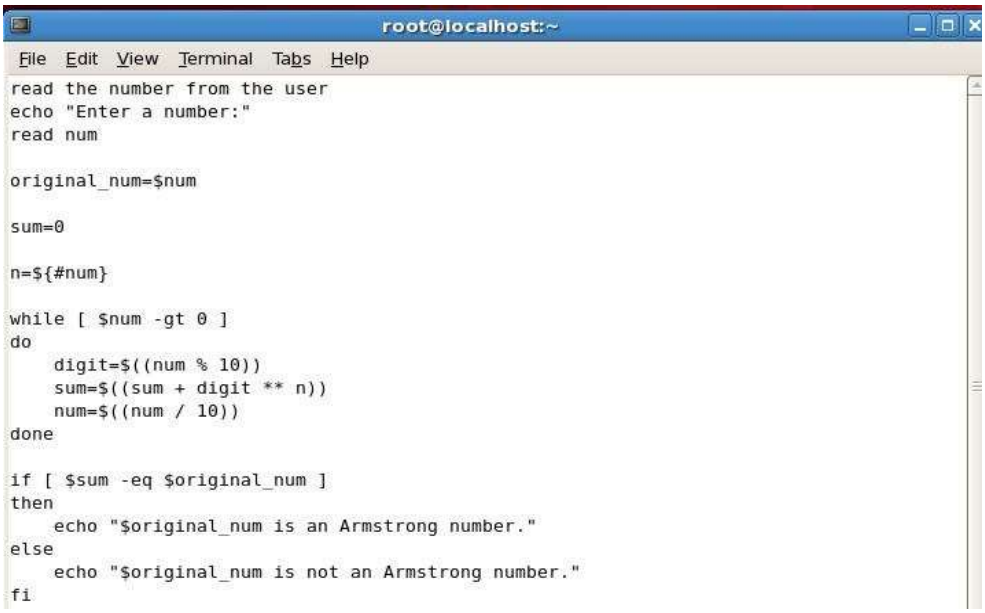



**Output :-**

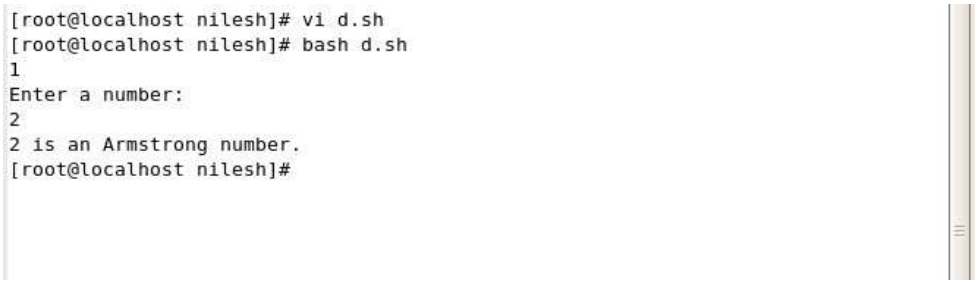


## 5) shell program for Armstrong number.

```
[root@localhost ~]# ls
[root@localhost ~]# pwd
/root
[root@localhost ~]# mkdir nilesh
[root@localhost ~]# cd
[root@localhost ~]# cd nilesh
[root@localhost nilesh]# vi d.sh
```

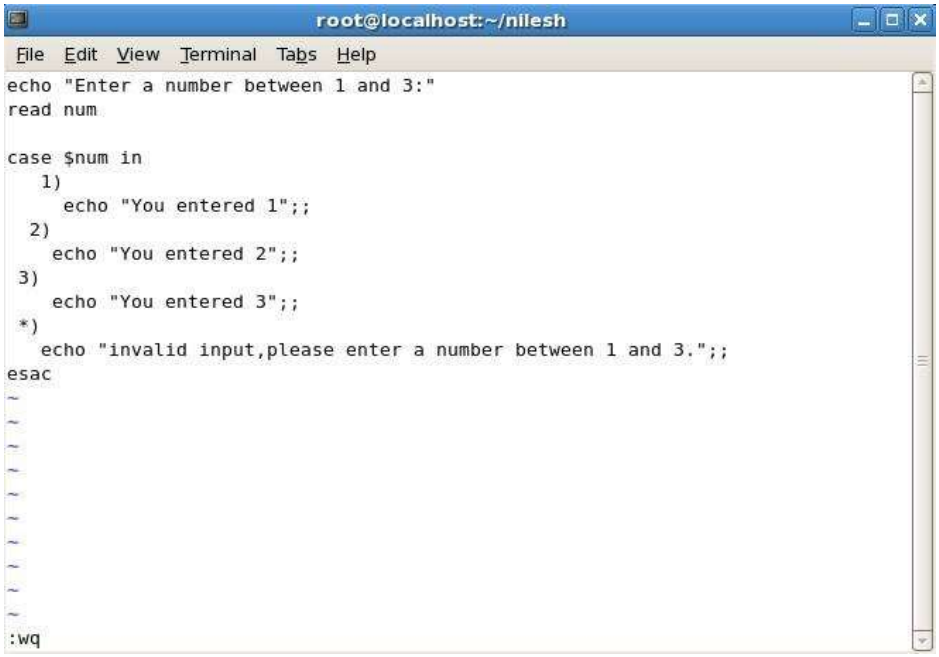


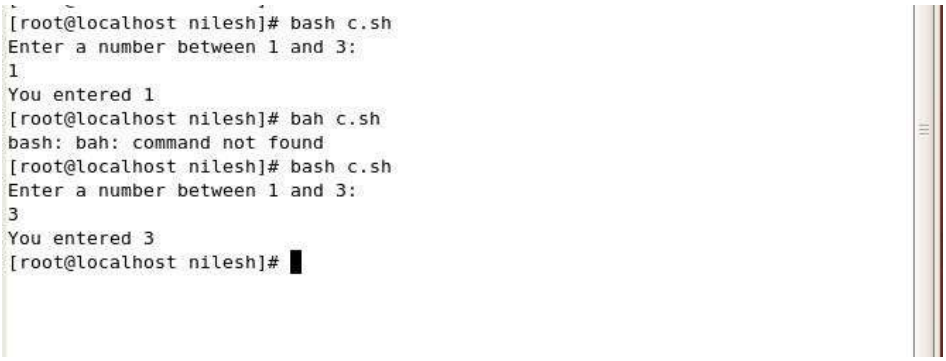

**Output :-**



## 6) Program to demonstrate a case statement using a shell script.

```
[root@localhost ~]# ls
[root@localhost ~]# pwd
/root
[root@localhost ~]# mkdir nilesh
[root@localhost ~]# cd
[root@localhost ~]# cd nilesh
[root@localhost nilesh]# vi c.sh
```

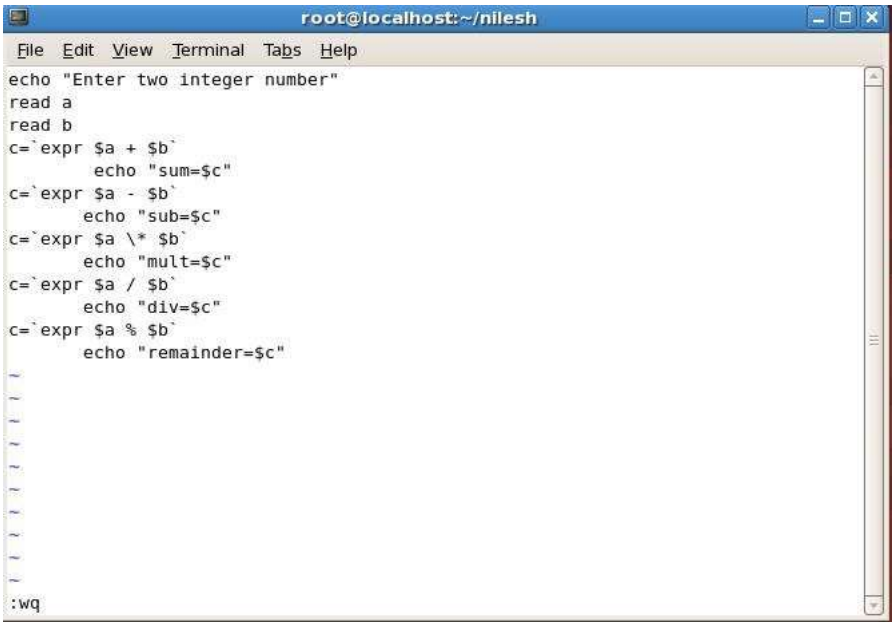


**Output :-**

## 7) shell script to evaluate arithmetic operations.

```
[root@localhost ~]# ls
[root@localhost ~]# pwd
/root
[root@localhost ~]# mkdir nilesh
[root@localhost ~]# cd
[root@localhost ~]# cd nilesh
[root@localhost nilesh]# vi k
```

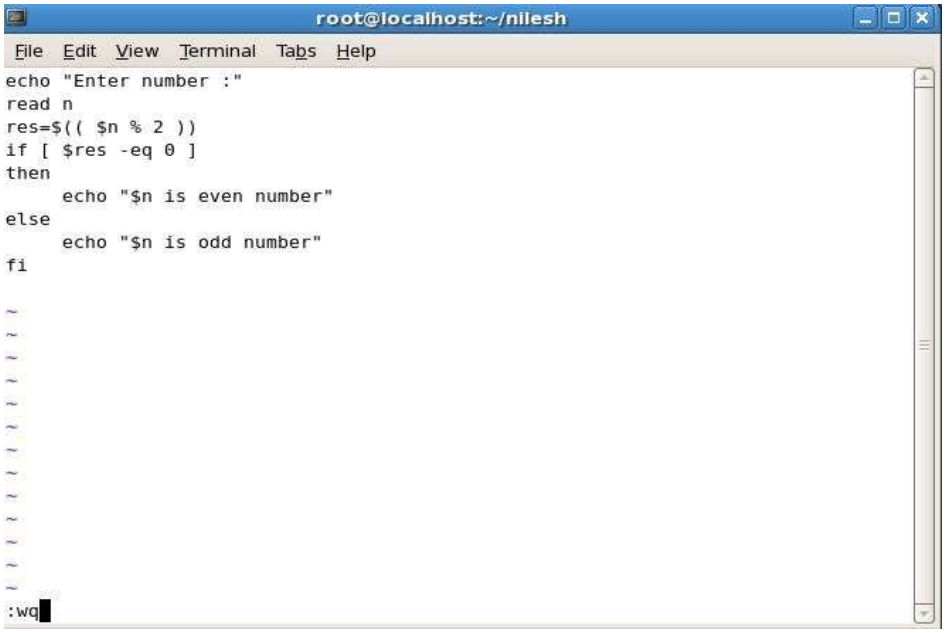



Output :-

```
[root@localhost nilesh]# bash k
Enter two integer number
22
6
sum=28
sub=16
mult=132
div=3
remainder=4
[root@localhost nilesh]#
```

## 8) Program for even or odd using shell scripts in Linux.

```
[root@localhost ~]# ls
[root@localhost ~]# pwd
/root
[root@localhost ~]# mkdir nilesh
[root@localhost ~]# cd
[root@localhost ~]# cd nilesh
[root@localhost nilesh]# vi w
```

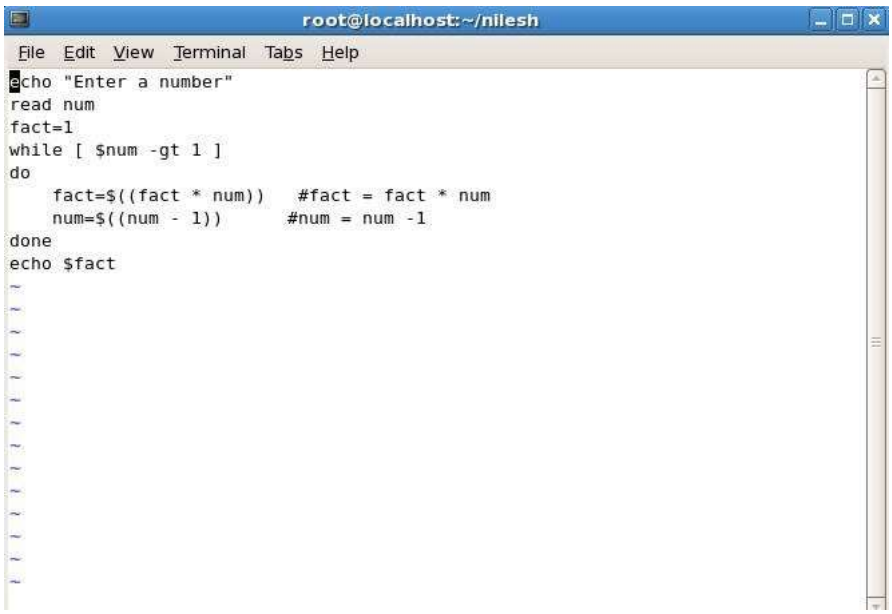



**Output :-**

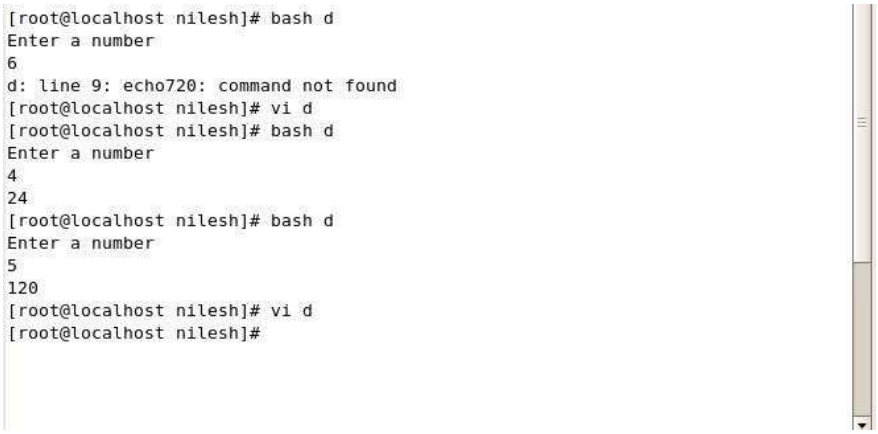
```
[root@localhost nilesh]# bash w
Enter number :
5
5 is odd number
[root@localhost nilesh]# bash w
Enter number :
20
20 is even number
[root@localhost nilesh]# vi w
[root@localhost nilesh]#
```

## 9) Program for factorial of given number by using shell script.

```
[root@localhost ~]# ls
[root@localhost ~]# pwd
/root
[root@localhost ~]# mkdir nilesh
[root@localhost ~]# cd
[root@localhost ~]# cd nilesh
[root@localhost nilesh]# vi d
```

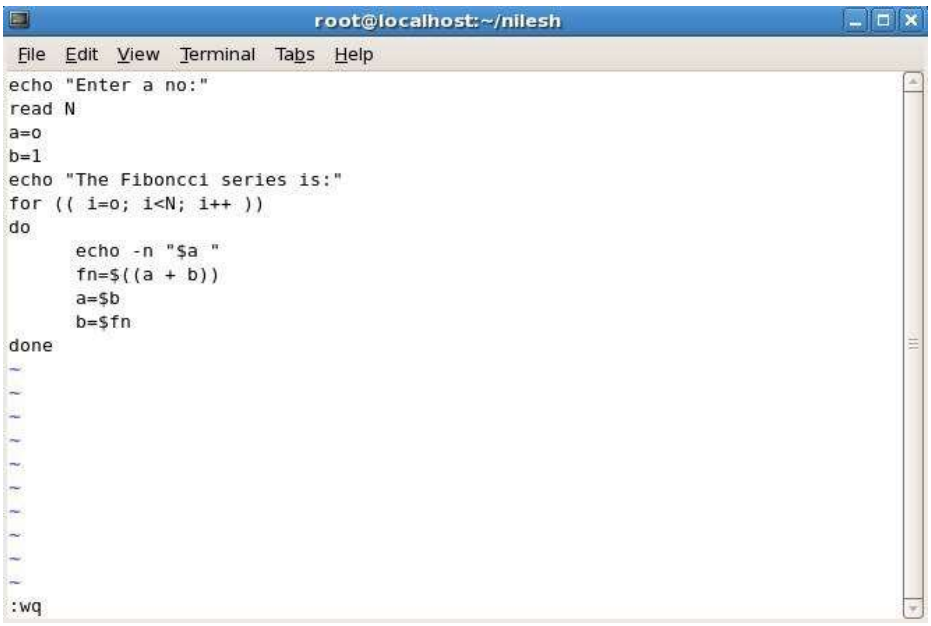



**Output :-**

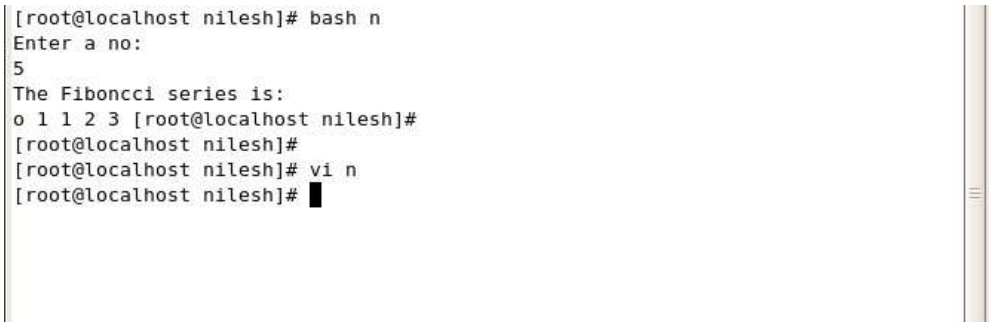



## 10) Program for Fibonacci series by using shell script.

```
[root@localhost ~]# ls
[root@localhost ~]# pwd
/root
[root@localhost ~]# mkdir nilesh
[root@localhost ~]# cd
[root@localhost ~]# cd nilesh
[root@localhost nilesh]# vi n
```

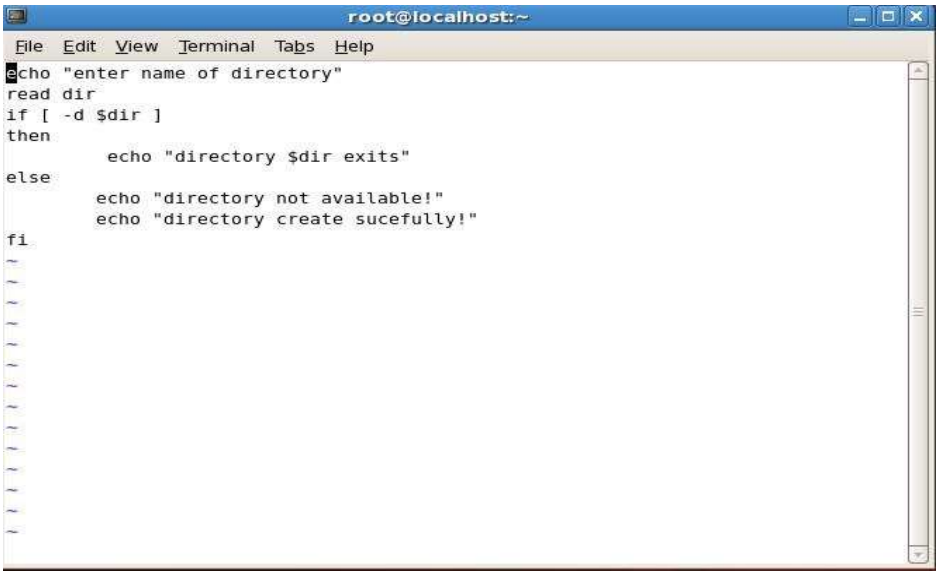



**Output :-**




**11) Write a shell script to read and check whether the directory exists or not, if not make a directory.**

```
[root@localhost ~]# ls
[root@localhost ~]# pwd
/root
[root@localhost ~]# mkdir nilesh
[root@localhost ~]# cd
[root@localhost ~]# cd nilesh
[root@localhost nilesh]# vi a
```




**Output :-**

```
[root@localhost ~]# bash a
enter name of directory
nilesh
directory nilesh exits
[root@localhost ~]# bash a
enter name of directory
pq
directory not available!
directory create sucefully!
[root@localhost ~]# vi a
[root@localhost ~]#
```

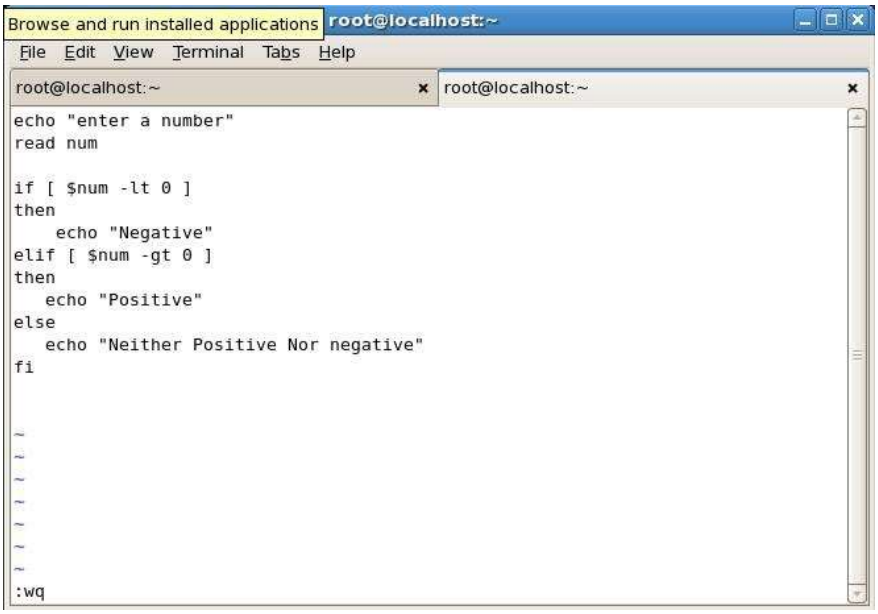
**12) shell script that demonstrates the use of the chmod command.**

```
[root@localhost ~]# ls
[root@localhost ~]# pwd
/root
[root@localhost ~]# mkdir nilesh
[root@localhost ~]# cd
[root@localhost ~]# cd sagar
[root@localhost sagar]# vi nice
```

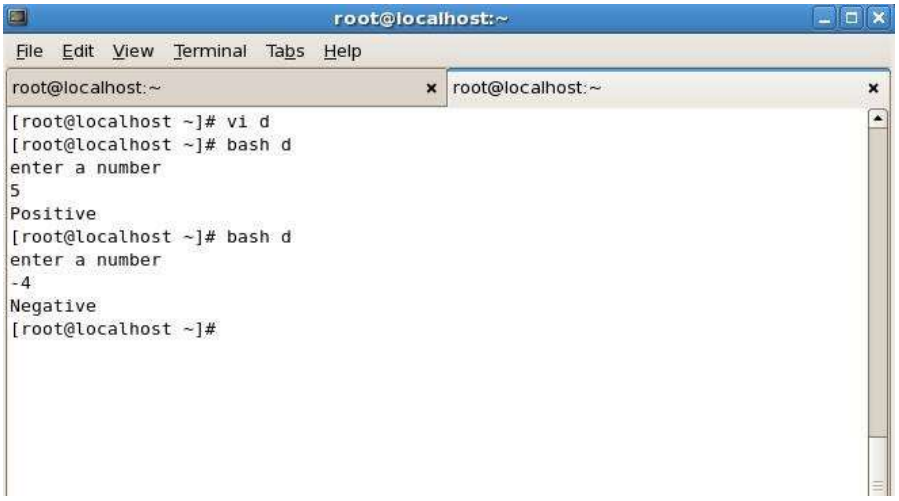

**Output :-**


**13) Shell Script to check entered number is negative, positive, or zero.**

```
[root@localhost ~]# ls
[root@localhost ~]# pwd
/root
[root@localhost ~]# mkdir nilesh
[root@localhost ~]# cd
[root@localhost ~]# cd nilesh
[root@localhost nilesh]# vi d
```



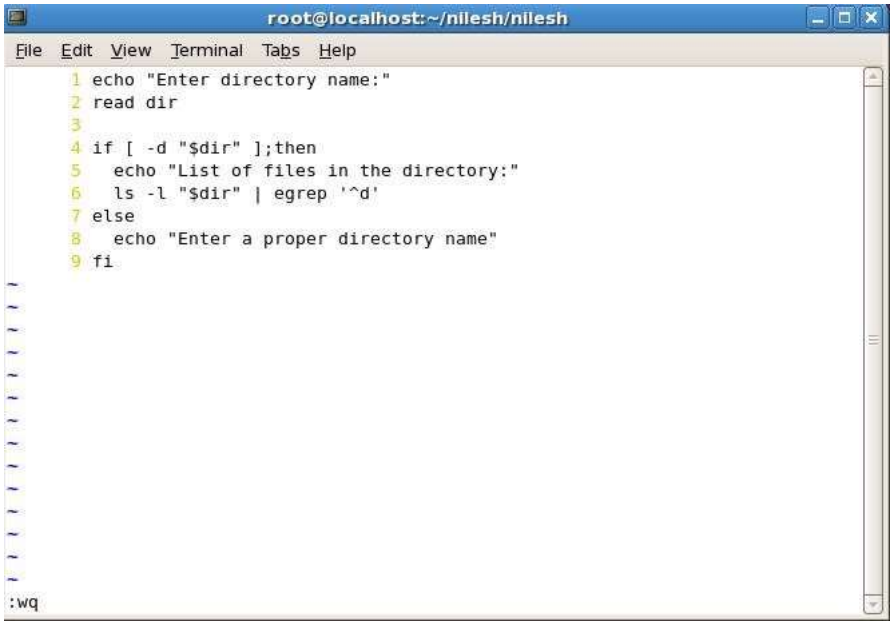

**Output :-**




**14) shell script to list all of the directory files in a directory.**

[root@localhost ~]# ls
[root@localhost ~]# pwd
/root
[root@localhost ~]# mkdir nilesh
[root@localhost ~]# cd
[root@localhost ~]# cd nilesh

[root@localhost nilesh]# vi t



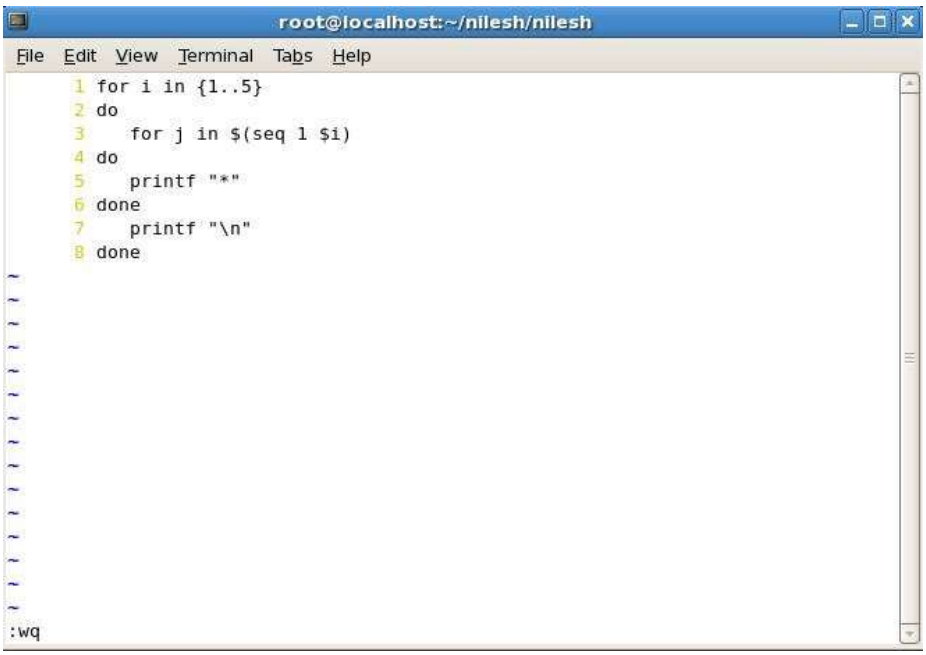

**Output :-**


**15) shell script to print the following pattern.**

```
*
* *
* * *
* * * *
```

[root@localhost ~]# ls
[root@localhost ~]# pwd
/root
[root@localhost ~]# mkdir nilesh

```
[root@localhost ~]# cd
[root@localhost ~]# cd nilesh
[root@localhost nilesh]# vi sd
```




**Output :-**