

Ex. No.: 3a)**Shell Script – Reverse of Digit****Date:28.01.25****Aim:**

To write a Shell script to reverse a given digit using looping statement.

Program:

```
echo "Enter a number"
read num
reverse=0
digit=0
while [ $num -gt 0 ]
do
    digit=$((num % 10))
    reverse=$((reverse * 10 + digit))
    num=$((num / 10))
done
echo "$reverse"
```

Sample Input and Output

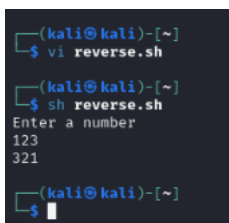
Run the program using the below command

```
[REC@local host~]$sh indhu.sh
```

enter number

123

321

**Result:**

Thus, the reverse a digit program has been successfully executed.

Ex. No.: 3b)**Shell Script – Fibonacci Series****Date:28.01.25****Aim:**

To write a Shell script to generate a Fibonacci series using for loop.

Program:

```
echo "Enter a number"
read n
a=0
b=1
echo "Fibonacci Series"
echo -n "$a $b "
i=2
for i in $(seq 2 $((n-1)))
do
    fn=`expr $a + $b`
    echo -n "$fn "
    a=$b
    b=$fn
done

echo
```

Sample Input and Output

Run the program using the below command

```
[REC@local host~]$sh indhu.sh
```

```
enter number
```

```
21
```

```
fibonacci series
```

0

1

1

2

3

5

8

13

21

34

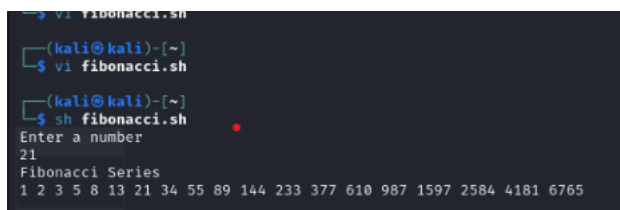
55

89

144

233

377



```
→ vi fibonacci.sh
(kali@kali)-[~]
$ vi fibonacci.sh
(kali@kali)-[~]
$ sh fibonacci.sh
Enter a number
21
Fibonacci Series
1 2 3 5 8 13 21 34 55 89 144 233 377 610 987 1597 2584 4181 6765
```

Result:

Thus, the Fibonacci program has been successfully executed.