Ex. No: 3a
Date: 28/1/25

<h2 style="text-align:center">Shell Script – Reverse of Digit</h2>

AIM:

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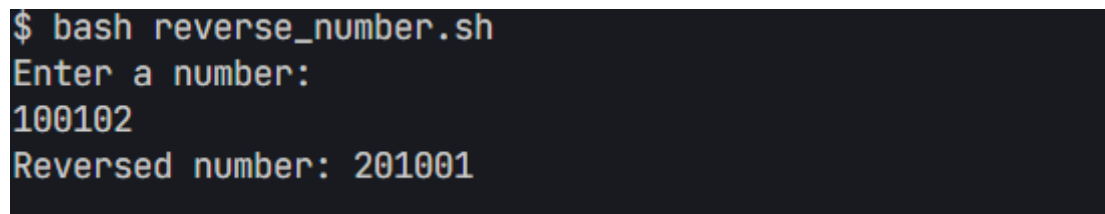
PROGRAM:

```bash
#!/bin/bash

read -p "Enter a number: " num

reverse=0
while [ $num -gt 0 ]; do
        digit=$(( num % 10 ))
        reverse=$(( reverse * 10 + digit ))
        num=$(( num / 10 ))
done

echo "Reversed number: $reverse"
```

OUTPUT:

```
$ bash reverse_number.sh
Enter a number:
100102
Reversed number: 201001
```

RESULT:

Thus, the shell script to reverse a given digit is successfully implemented.

Ex no: 3b

Shell Script – Fibonacci Series

AIM:

   To write a Shell script to generate a Fibonacci series using a for loop.
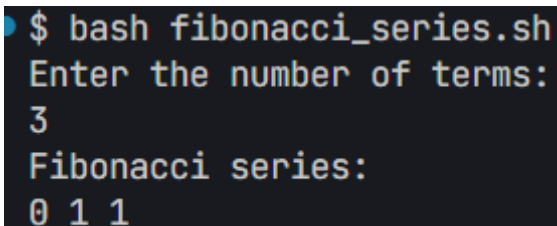
PROGRAM:
#!/bin/bash

read -p "Enter the number of terms: " n

a=0
b=1

echo "Fibonacci Series:"
for ((i=0; i<n; i++))
do
   echo -n "$a "
   temp=$((a + b))
   a=$b
   b=$temp
done

echo

OUTPUT

```
$ bash fibonacci_series.sh
Enter the number of terms:
3
Fibonacci series:
0 1 1
```

RESULT:

      Thus, the Shell Script to generate the Fibonacci series is successfully implemented.