

OPEARTING SYSTEM

Experiment No. 04

AIM - To Implement the program in the shell script.

- ① To print given number in reverse order
- ② To find the even and odd numbers from the given array.

Theory →

The Algorithm for reversing strings or numbers in reverse order as →

- ① First, reverse the lines and words or it can be number sometimes using the ~~rev~~ rev command further,
- ② We can use perl with print scalar reverse option.
- ③ Then, we can use awk command to reverse the data under Linux or UNIX.
- ④ There's also sed command one line for reversing given input.
- ⑤ Finally, we can write a shell script to reverse the program one by one.

Conclusion →

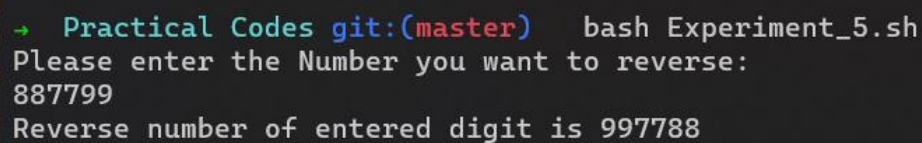
Thus, we successfully learned the methods of reversing strings and numbers in shell programming, and we also found even and odd numbers from an array.

Program codes:

Program 01

```
# n=123465
echo "Please enter the Number you want to reverse:"
read n
sd=0
rev=0
while [ $n -gt 0 ]
do
    sd=$(( $n % 10 ))
    rev=$(( $rev * 10 + $sd ))
    n=$(( $n / 10 ))
done
echo "Reverse number of entered digit is $rev"
```

Output:

A terminal window with a dark background. The prompt is 'Practical Codes git:(master) bash Experiment_5.sh'. The user enters '887799'. The program outputs 'Reverse number of entered digit is 997788'.

```
→ Practical Codes git:(master) bash Experiment_5.sh
Please enter the Number you want to reverse:
887799
Reverse number of entered digit is 997788
```

Program codes:

Program 02

```
echo "---- EVEN OR ODD IN SHELL SCRIPT ----"
echo -n "Enter a number:"
read n
echo -n "RESULT: "
if [ `expr $n % 2` == 0 ]
then
    echo "$n is even"
else
    echo "$n is Odd"
fi
```

Output:

```
→ Practical Codes git:(master) bash Experiment_2.sh
---- EVEN OR ODD IN SHELL SCRIPT ----
Enter a number:77
RESULT: 77 is Odd
```