

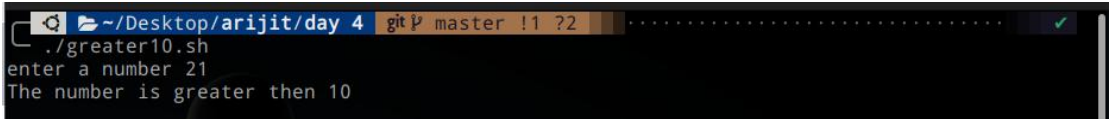
Day 4

1. **Problem :** Check whether a number is greater than 10.

Solution :

```
echo -n "enter a number "  
read num  
if [ $num -gt 10 ]  
then  
echo "The number is greater than 10"  
else  
echo "the number smaller than 10"  
fi
```

Output :



```
~/Desktop/arjit/day 4 git master !1 ?2  
./greater10.sh  
enter a number 21  
The number is greater than 10
```

2. **Problem :** Greater between 3 numbers.

Solution :

```
read -p "Enter 1st number " num1  
read -p "Enter 2nd number " num2  
read -p "Enter 3rd number " num3  
  
if [ $num2 -gt $num1 ]  
then  
if [ $num2 -gt $num3 ]  
then  
echo "Num 2 is greater"  
else  
echo "Num 3 is greater"  
fi  
else  
if [ $num1 -gt $num3 ]  
then  
echo "Num 1 is greater"  
else  
echo "Num 3 is greater"  
fi  
fi
```

Output :



```
~/Desktop/arjit/day 4 git master !1 ?2  
./greaterbetween3.sh  
Enter 1st number 10  
Enter 2nd number 21  
Enter 3rd number 7  
Num 2 is greater
```

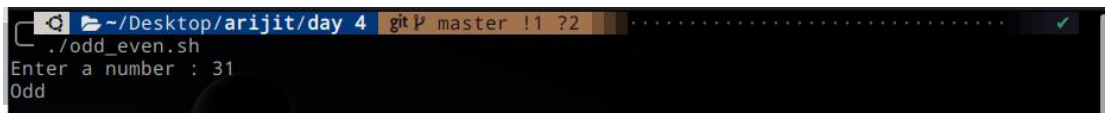
3. Problem : Check Odd or Even.

Solution :

```
read -p "Enter a number : " num
```

```
if [ $((($num % 2)) -eq 0 ]  
then  
echo "Even"  
else  
echo "Odd"  
fi
```

Output :



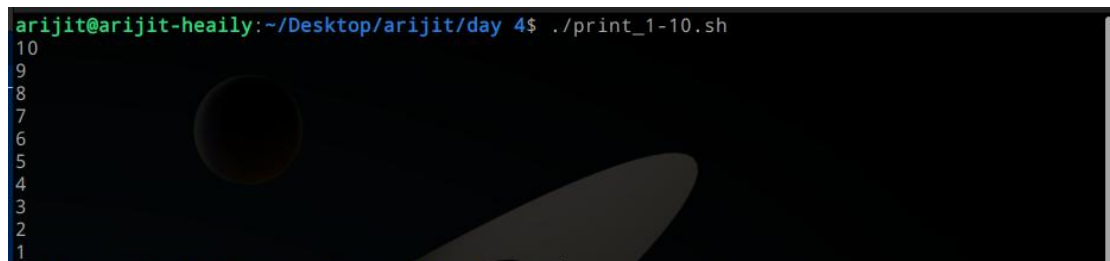
```
~/Desktop/arijit/day 4 git P master !1 ?2  
./odd_even.sh  
Enter a number : 31  
Odd
```

4. Problem : Print 1 to 10.

Solution :

```
for num in {1..10}  
do  
echo $num  
done
```

Output :



```
arijit@arijit-heaily:~/Desktop/arijit/day 4$ ./print_1-10.sh  
10  
9  
8  
7  
6  
5  
4  
3  
2  
1
```

5. Problem : Print 1 to 10 in reverse.

Solution :

```
for num in {10..1}
do
echo $num
done
```

Output :

A terminal window with a dark background and a subtle space-themed wallpaper. The prompt is 'arijit@arijit-heaily:~/Desktop/arijit/day 4\$'. The command './reverse_1_to_10.sh' has been executed, resulting in the numbers 10, 9, 8, 7, 6, 5, 4, 3, 2, and 1 being printed on separate lines.

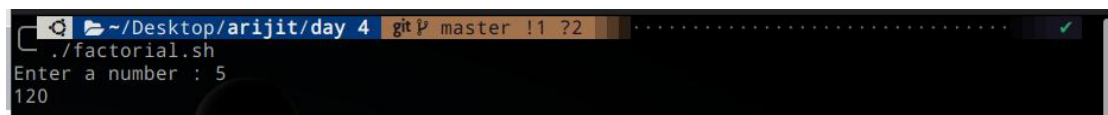
```
arijit@arijit-heaily:~/Desktop/arijit/day 4$ ./reverse_1_to_10.sh
10
9
8
7
6
5
4
3
2
1
```

6. Problem : Factorial of a given number.

Solution :

```
read -p "Enter a number : " number
factorial=1
while [ $number -gt 1 ]
do
factorial=$((factorial*$number))
number=$((number-1))
done
echo $factorial
```

Output :

A terminal window showing the execution of a script. The prompt is 'arijit@arijit-heaily:~/Desktop/arijit/day 4\$'. The command './factorial.sh' is entered. The script prompts 'Enter a number : ' and the user enters '5'. The output of the script is '120'.

```
arijit@arijit-heaily:~/Desktop/arijit/day 4$ ./factorial.sh
Enter a number : 5
120
```