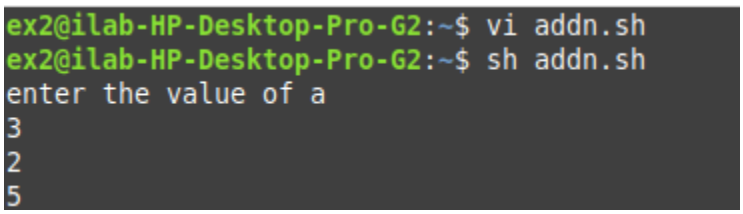
MAINAK CHATTOPADHYAY
21BAI1217
OPERATING SYSTEMS LAB 4

1.
CODE

```
echo enter the value of a
read a
read b
c=$((a+b))
echo $c
```

OUTPUT



2.

Check whether a number is Prime or Not

CODE-

```
echo "enter number"
read num
function prime
{
for((i=2; i<=num/2; i++))
do
  if [ $((num%i)) -eq 0 ]
  then
    echo "$num is not a prime number."
    exit
  fi
done
echo "$num is a prime number."
}
r=`prime $number`
echo "$r"
```

OUTPUT

```
ex2@ilab-HP-Desktop-Pro-G2:~$ bash prime.sh
enter number
17
17 is a prime number.
ex2@ilab-HP-Desktop-Pro-G2:~$ bash prime.sh
enter number
4
4 is not a prime number.
ex2@ilab-HP-Desktop-Pro-G2:~$
```

3. To find the factorial of a number

Code -

```
echo "enter the number"
read n
fact=1
for((i=2;i<=n;i++))
do
        fact=$((fact*i))
done
echo $fact
```

Output

```
ex2@ilab-HP-Desktop-Pro-G2:~$ bash fact.sh
enter the number
5
120
```

4. To find the smallest element in a array

Code-

```
echo "Enter the total numbers :"
read n
echo "Enter numbers :"
i=0
while [ $i -lt $n ]
do
   read a[$i]
   i=`expr $i + 1`
done

echo "Array entered"
i=0
while [ $i -lt $n ]
do
   echo ${a[$i]}
   i=`expr $i + 1`
done

min=${a[0]}
for i in "${a[@]}"
do
   if [[ "$i" -lt "$min" ]];
   then
      min="$i"
   fi
done
echo "Min is: $min"
```

Output-

```
ex2@ilab-HP-Desktop-Pro-G2:~$ vi smallele.sh
ex2@ilab-HP-Desktop-Pro-G2:~$ bash smallele.sh
Enter the total numbers :
6
Enter numbers :
54
45
6
98
1
0
Array entered
54
45
6
98
1
0
Min is: 0
ex2@ilab-HP-Desktop-Pro-G2:~$
```