

**OPERATING SYSTEMS**  
**COURSE CODE: UCT401**

**SUBMITTED BY: DIVIJA**  
**102018056**  
**CSBS3**

# INDEX

SERIAL NUMBER	TITLE
1	Even odd
2	Prime number
3	Factorial
4	Fibonacci
5	Sum of series

### Question 1: EVEN ODD:

```
echo "enter a number"
read a
if [ `expr $a \% 2` -eq 0 ]
then echo "even"
else echo "odd"
fi
```

OUTPUT:

```
~/a$ bash evenodd
enter a number
5
odd
~/a$ bash evenodd
enter a number
4
even
~/a$
```

### Question 2: PRIME NUMBER:

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

OUTPUT:

```
~/a$ bash primeno
enter a number:
7
7 is a prime number.
~/a$ bash primeno
enter a number:
6
6 is not a prime number.
```

### Question 3: FACTORIAL:

```

echo " enter a number:"
read num
fact=1
while [ $num -gt 1 ]
do
    fact=`expr $num \* $fact`
    num=`expr $num - 1`
done
echo $fact

```

OUTPUT:

```

~/a$ bash fact
enter a number:
5
120

```

#### Question 4: FIBONACCI SERIES:

```

echo "enter a number:"
read N

a=0
b=1

echo "The Fibonacci series is : "

for (( i=0; i<N; i++ ))
do
    echo -n "$a "
    ans=`expr $a + $b`
    a=$b
    b=$ans
done

```

OUTPUT:

```

~/a$ bash fibna
enter a number:
5
The Fibonacci series is :
0 1 1 2 3 ~/a$

```

#### Question 5 : SUM OF SERIES:

```

echo " enter a number:"
read num
sum=0
while [ $num -gt 0 ]
do
    sum=`expr $num + $sum`
    num=`expr $num - 1`
done

echo $sum

```

OUTPUT:

```
~/a$ bash sos  
enter a number:  
10  
55
```