

1) factorial

```
# !/bin/bash
echo "Enter a number"
read num
fact=1
n=$num;
while [ $num -ge 1 ]
do
    fact=`expr $fact \* $num`
    num=`expr $num - 1`
done
echo "Factorial of $n is $fact"
```

2)Addn of two num

```
#!/bin/bash
# Calculate the sum of two integers with pre initialize values
# in a shell script
```

```
a=10
b=20
```

```
sum=$(( $a + $b ))
```

```
echo "Sum is: $sum"
```

3)Fibonacci series

```
#!/bin/bash
echo "Enter the value of n"
read n
a=0
b=1
count=2
echo "Fibonacci series:"
echo $a
echo $b
while [ $count -le $n ]
do
    fib=`expr $a + $b`
    a=$b
    b=$fib
    echo $fib
    count=`expr $count + 1`
done
```