Practical 3

```
echo This is program for fibonacci series
echo
#!/bin/bash
echo "Enter the number of terms:"
read n
a=0
b=1
echo "The Fibonacci series is:"
for (( i=0; i<n; i++ ))
do
    echo -n "$a "
    fn=$((a + b))
    a=$b
    b=$fn
done
echo
~
~
~
~
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~
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~
~
~
~
-- INSERT --
```

```
Lakshay@Lenovo-M ~
$ vim fibonacciseries.sh

Lakshay@Lenovo-M ~
$ sh fibonacciseries.sh
This is program for fibonacci series

Enter the number of terms:
10
The Fibonacci series is:
0 1 1 2 3 5 8 13 21 34
```

```bash
echo
echo This is a program to find largest among three numbers.
echo
#!/bin/bash
echo "Enter three numbers:"
read a b c
if [ $a -gt $b ] && [ $a -gt $c ]; then
    echo "$a is the largest number."
elif [ $b -gt $a ] && [ $b -gt $c ]; then
    echo "$b is the largest number."
else
    echo "$c is the largest number."
fi
```

```
Lakshay@Lenovo-M ~
$ vim largestamongthreenumbers.sh
```

```
Lakshay@Lenovo-M ~
$ sh largestamongthreenumbers.sh

This is a program to find largest among three numbers.

Enter three numbers:
7 18 45
45 is the largest number.
```

```
Lakshay@Lenovo-M ~
$ vim largestamongthreenumbers.sh

Lakshay@Lenovo-M ~
$ sh largestamongthreenumbers.sh

This is a program to find largest among three numbers.

Enter three numbers:
45 15 77
77 is the largest number.
```

```
echo This is program to find average of N numbers
echo
#!/bin/bash
echo "Enter the number for which you want the average:"
read n
sum=0
echo "Enter the numbers:"
for (( i=0; i<n; i++ ))
do
    read num
    sum=$((sum + num))
done
average=$(echo "scale=2; $sum / $n" | bc)
echo "The average of the given numbers is $average"
```

```
Lakshay@Lenovo-M ~
$ vim averageofNnumbers.sh

Lakshay@Lenovo-M ~
$ sh averageofNnumbers.sh
This is program to find average of N numbers

Enter the number for which you want the average:
5
Enter the numbers:
5
10
15
20
25
The average of the given numbers is 15.00
```

```
echo This is program to find average of N numbers
echo
#!/bin/bash
echo "Enter the number of terms for which you want the average:"
read n
sum=0
echo "Enter the numbers:"
for (( i=0; i<n; i++ ))
do
    read num
    sum=$((sum + num))
done
average=$(echo "scale=1; $sum / $n" | bc)
echo "The average of the given numbers is $average"
```

```
Lakshay@Lenovo-M ~
$ vim averageofNnumbers.sh

Lakshay@Lenovo-M ~
$ sh averageofNnumbers.sh
This is program to find average of N numbers

Enter the number of terms for which you want the average:
5
Enter the numbers:
5
10
15
20
25
The average of the given numbers is 15.0
```