

REG NO : 23BRS1157

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1. Write a shell script to find the smallest of three numbers

```
2 echo "Enter three numbers:"
3 read num1
4 read num2
5 read num3
6
7 smallest=$num1
8
9 if [ $num2 -lt $smallest ]; then
10     smallest=$num2
11 fi
12
13 if [ $num3 -lt $smallest ]; then
14     smallest=$num3
15 fi
16 |
17 echo "The smallest number is: $smallest"
18
```

```
Enter three numbers:
5
8
3
The smallest number is: 3
```

2. Write a shell program to find the largest of three numbers.

```
1 echo "Enter Num1"
2 read num1
3 echo "Enter Num2"
4 read num2
5 echo "Enter Num3"
6 read num3
7
8 if [ $num1 -gt $num2 ] && [ $num1 -gt $num3 ]
9 then
10     echo $num1
11 elif [ $num2 -gt $num1 ] && [ $num2 -gt $num3 ]
12 then
13     echo $num2
14 else
15     echo $num3
16 fi
17 |
```

```
Enter Num1
4
Enter Num2
55
Enter Num3
7
55
```

3. Write a shell script to find the factorial of given number

```
1 echo "Enter a Number"
2 read n
3 i=`expr $n - 1`
4 p=1
5 while [ $i -ge 1 ]
6 do
7 n=`expr $n \* $i`
8 i=`expr $i - 1`
9 done
10 echo "The Factorial of the given Number is $n"
11
```

```
Enter a Number
7
The Factorial of the given Number is 5040
```

4. Write a shell program to generate n terms of Fibonacci Series.

```
1 #!/bin/bash
2
3 # Read the value of n from user
4 echo -n "Enter the number of terms: "
5 read n
6
7 # Initialize variables
8 a=0
9 b=1
10
11 # Print the first two terms
12 echo -n "$a $b "
13
14 # Generate the Fibonacci series
15 for (( i=2; i<=$n; i++ ))
16 do
17     c=$((a + b))
18     echo -n "$c |"
19     a=$b
20     b=$c
21 done
22
23 echo
24
```

```
Enter the number of terms: 8
0 1 1 2 3 5 8 13
```

## 5. To Print Array Value in Shell Script?

CODE:

#To Print All elements [@] & [\*] means All elements of Array.

```
echo ${ARRAYNAME[*]}
```

```
#To declare static Array  
arr=(I love my India)
```

```
# To print all elements of array  
echo ${arr[@]}  
echo ${arr[*]}  
echo ${arr[@]:0}  
echo ${arr[*]:0}
```

```
I love my India  
I love my India  
I love my India  
I love my India
```