

Program 10: Shell script to print the combination of numbers 1 2 3

```
GNU nano 3.2
#!/bin/sh
for i in 1 2 3
do
for j in 1 2 3
do
for k in 1 2 3
do
echo "$i $j $k"
done
done
done
```

Output:

```
bash: /opt/ros/noetic/setup.bash: No such file or directory
bash: /opt/ros/noetic/setup.bash: No such file or directory
bmsce@bmsce-Precision-T1700:~$ nano progm10.sh
bmsce@bmsce-Precision-T1700:~$ sh progm10.sh
1 1 1
1 1 2
1 1 3
1 2 1
1 2 2
1 2 3
1 3 1
1 3 2
1 3 3
2 1 1
2 1 2
2 1 3
2 2 1
2 2 2
2 2 3
2 3 1
2 3 2
2 3 3
3 1 1
3 1 2
3 1 3
3 2 1
3 2 2
3 2 3
3 3 1
3 3 2
3 3 3
```

Program 11: Shell script to find power of a number

```
GNU nano 3.2
#!/bin/sh
echo "Enter the number x:\c"
read x
echo "Enter the power n:\c"
read n
count=2
value=$x
while [ $count -le $n ]
do
    value=$((value*x))
    count=$((count+1))
done
echo "Power : $value"
```

Output:

```
bmsce@bmsce-Precision-T1700: ~
bash: /opt/ros/noetic/setup.bash: No such file or directory
bash: /opt/ros/noetic/setup.bash: No such file or directory
bmsce@bmsce-Precision-T1700:~$ nano prog11.sh
bmsce@bmsce-Precision-T1700:~$ sh prog11.sh
Enter the number x:2
Enter the power n:2
Power : 4
bmsce@bmsce-Precision-T1700:~$ sh prog11.sh
Enter the number x:2
Enter the power n:4
Power : 16
bmsce@bmsce-Precision-T1700:~$
```

Program 12: Shell Script to find the sum of n natural numbers

```
GNU nano 3.2
#!/bin/sh
echo "Enter the number:\c"
read n
i=0
while [ $n -gt 0 ]
do
    i=$((i+n))
    n=$((n-1))
done
echo "Sum:$i"
```

Output:

```
Q
bmsce@bmsce-Precision-T1700:~$ sh prog12.sh
Enter the number:4
Sum:10
bmsce@bmsce-Precision-T1700:~$ sh prog12.sh
Enter the number:6
Sum:21
bmsce@bmsce-Precision-T1700:~$
```

Program 13: Shell Script to find Fibonacci Series upto n

```
GNU nano 3.2

#!/bin/sh
echo "enter a number"
read n
a=0
b=1
c=$((a+b))
echo "$a"
echo "$b"
while [ $c -le $n ]
do
    echo "$c"
    a=$b
    b=$c
    c=$((a+b))
done

```

Output:

```
bmsce@bmsce-Precision-T1700:~$ nano fibi.sh
bmsce@bmsce-Precision-T1700:~$ sh fibi.sh
enter a number
3
0
1
1
2
3
bmsce@bmsce-Precision-T1700:~$ sh fibi.sh
enter a number
2
0
1
1
2
bmsce@bmsce-Precision-T1700:~$
```