① Write a UNIX shell script to display combinations of 123

```
i=1  j=2  k=3
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
```

O/P

```
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 Write a Shell Script to print positional parameters using for loop.

```
for i in $0 $1 $2 do
echo "$0 = " $0
echo "$1 = " $1
echo "$2 = " $2
done.
```

③ Shell script to find the power of a number.

```
echo "enter the number"
read a
echo "enter the power"
read b
power='echo $a^$b |bc'
echo "$power"
```

O/P
enter the number
4
enter the power
2

16.

④ Shell script to find the sum of n natural numbers.

```
echo "Enter n Value"
read n
num=0
while [ $n -gt 0 ]
do
num=$((num +n))
n=$((n -1))
done
echo "$ num"
```

O/P

Enter n value

5

15.

40 +.50 - pass
50 to 60 - First
60 to 75 - Second
75 to 100 - distinction

⑤ Shell script to display the pass class of a student.

```
echo "Enter the percentage"
read percent
if [ $percent -ge 40] && [ $percent -lt 50] then
echo "pass" fi
if [ $percent -ge 50] && [ $percent -lt 60] then
echo "first class" fi
if [ $percent -ge 60] && [ $percent -lt 75] then
echo "Second class" fi
if [ $percent -ge 75] && [$percent -le 100] then
echo "Distinction"
fi
```

O/P

Enter the percentage
75
Distinction

⑥ Shell script to find the fibonacci series up to n.
echo "Enter the n value"
read n
n1 = 0
n2 = 1
num = 0
  echo "0"
  echo "1"
  while [$n gt 0]
  do
  num = $((n1 + n2))
  n1 = $((n2))
  n2 = $((num))
  n = $((n-1))
  echo "$num"
  done

O/P
Enter the n value
6
0
1
1
2
3
5
8
13

O/p &ua
5/12/22