Bash Shell Script to display Pyramid and Pattern

In this script, you will learn how to create half and full pyramids, Floyd's traingle and Pascal's triangle using if-then statement.

Bash Shell Script to print half pyramid using *

```
*
* * *
* * *
* * *
* * * *
* * * *
* * * *

#Bash Shell Script to print half pyramid using *
rows=4
for((i=1; i<=rows; i++))
do
    for((j=1; j<=i; j++))
    do
        echo -n "* "
    done
    echo
done</pre>
```

Bash Shell Script to print half pyramid using numbers

```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
```

```
#Bash Shell Script to print half pyramid using numbers
number=1
rows=5
for((i=1; i<=rows; i++))
do
    for((j=1; j<=i; j++))
    do
        echo -n "$number "
        number=$((number + 1))
    done
    number=1
    echo
done</pre>
```

Bash Shell Script to print inverted half pyramid using *

```
# * * * * *
* * * *
* * *

#Bash Shell Script to print inverted half pyramid using *
rows=5
for((i=rows; i>=1; i--))
```

```
#Bash Shell Script to print inverted half pyramid using *
rows=5
for((i=rows; i>=1; i--))
do
    for((j=1; j<=i; j++))
    do
        echo -n "* "
    done
    echo
done</pre>
```

Bash Shell Script to print inverted half pyramid using numbers

```
1 2 3 4 5
1 2 3 4
1 2 3
1 2
```

```
#Bash Shell Script to print inverted half pyramid using numbers
number=1
rows=5
for((i=rows; i>=1; i--))
do
    for((j=1; j<=i; j++))
    do
        echo -n "$number "
        number=$((number + 1))
    done
    number=1
    echo
done</pre>
```

Bash Shell Script to print full pyramid using *

```
#Bash Shell Script to print full pyramid using *
rows=5
for((i=1; i<=rows; i++))
do
    for((j=1; j<=rows - i; j++))
    do
        echo -n " "
    done
    for((j=1; j<=2*i - 1; j++))
    do
        echo -n "* "
    done
    echo -n "* "
    done
    echo done</pre>
```

Bash Shell Script to print full pyramid using numbers

```
1
2 3 2
3 4 5 4 3
4 5 6 7 6 5 4
5 6 7 8 9 8 7 6 5
```

```
#Bash Shell Script to print full pyramid using numbers
rows=5
number=1
for((i=1; i<=rows; i++))</pre>
  for((j=1; j<=rows - i; j++))</pre>
  do
    echo -n " "
  done
  number=$i
  k=1
  for((j=1; j<=2*i - 1; j++))</pre>
    if [ $j -lt $i ];
      echo -n "$number "
      number=\$((number + 1))
    elif [ $j -eq $i ];
    then
      echo -n "$number "
      number=$((number - 1))
      echo -n "$number "
      number=$((number - 1))
    fi
  done
  echo
done
```

Bash Shell Script to print Floyd's Triangle

```
1
2 3
4 5 6
7 8 9 10
```

```
#Bash Shell Script to print Floyd's Triangle
number=1
rows=4
for((i=1; i<=rows; i++))
do
    for((j=1; j<=i; j++))
    do
        echo -n "$number "
        number=$((number + 1))
    done
    echo
done</pre>
```