pattern Assignment

1)//Given an integer **N**, print **N** stars in a single line.

```
import java.util.Scanner;
class MyClass {

    public static void main(String args[]) {
      Scanner sc=new Scanner(System.in);
      int n=sc.nextInt();
      for(int i=1;i<=n;i++){
      System.out.print("*");
      }

    }
}
```

2)//Given two integers **N** and **M** as inputs, print a rectangle of **N * M** stars.

```
import java.util.Scanner;
class MyClass {

    public static void main(String args[]) {
      Scanner sc=new Scanner(System.in);
      int m=sc.nextInt();
      int n=sc.nextInt();
      for(int i=1;i<=n;i++)
      {
          for(int j=1;j<=m;j++)
          {
      System.out.print("*");
          }
          System.out.println();
      }
```

```
    }
}
```

3) //Take an integer **N** as input, print the corresponding stair pattern for **N**.

```
import java.util.Scanner;
class pattern {
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        int n=sc.nextInt();
        for(int row=1;row<=n;row++)
        {
            for(int col=1;col<=row;col++)
            {
                System.out.print("*");
            }
            System.out.println();
        }
    }
}
```

4)//

```
import java.util.Scanner;
public class NumberPatternPrograms
{
    public static void main(String[] args)
    {
        Scanner sc = new Scanner(System.in);
        //Taking rows value from the user
        System.out.println("How many rows you want in this pattern?");
        int rows = sc.nextInt();
        System.out.println("Here is your pattern....!!!");
        for (int i = 1; i <=rows; i++)
        {
            for (int j = 1; j < i*2; j++)
            {
```

```
            if(j % 2 == 0)
            {
                System.out.print(" ");
            }
            else
            {
                System.out.print(j);
            }

        }

        System.out.println();
    }
   }
}
```

5)

```
import java.util.*;

public class myclass {
// Function to demonstrate pattern
public static void printPattern(int n)
{
int i, j;

// outer loop to handle rows
for (i = n; i >= 1; i--) {

// inner loop to print spaces.
for (j = 1; j < i; j++) {
System.out.print(" ");
}

// inner loop to print stars.
```

```
for (j = 0; j <= n - i; j++) {
System.out.print("*");
}

// printing new line for each row
System.out.println();
}
}

// Driver Function
public static void main(String args[])
{
int n = 6;
printPattern(n);
}
}
```

6) //Numeric inverted Half Pyramid

```
import java.util.Scanner;



public class myclass{
// Function to demonstrate pattern
public static void printPattern(int n)
{
int i, j;
// outer loop to handle number of rows
for (i = n; i >= 1; i--) {
// inner loop to handle number of columns
for (j = 1; j <= i; j++) {
// printing column values upto the row
// value.
System.out.print(j + " ");
}
```

```
// print new line for each row
System.out.println();
}
}

// Driver Function
public static void main(String args[])
{
Scanner sc=new Scanner(System.in);
int n=sc.nextInt();
printPattern(n);
}
}
```

7)

```
import java.util.Scanner;
// Java Program to print pattern
// Number-increasing pyramid
import java.util.*;

public class myclass {
// Function to demonstrate pattern
public static void printPattern(int n)
{
int i, j;
// outer loop to handle number of rows
for (i = 1; i <= n; i++) {
// inner loop to handle number of columns
for (j = 1; j <= i; j++) {
// printing column values upto the row
// value.
System.out.print(j + " ");
}

// print new line for each row
```

```
System.out.println();
}
}

// Driver Function
public static void main(String args[])
{
Scanner sc=new Scanner(System.in);
int n=sc.nextInt();
printPattern(n);
}
}
```

9)

```
import java.util.Scanner;
class HelloWorld {
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        int n=sc.nextInt();
        for(int row=1;row<=n;row++)

        {
            System.out.print("*");
            for(int i=1;i<=(n-1);i++)
            {
                System.out.print(" ");
                System.out.println("*");
        }

    }
    System.out.println();
    }
}
```

10)//right angle hallow triangle

```
import java.util.Scanner;

public class HollowInvertedRightTriangle1 {
private static Scanner sc;
public static void main(String[] args) {
sc = new Scanner(System.in);
System.out.print("Enter Hollow Inverted Right Triangle Pattern Rows = ");
int rows = sc.nextInt();
System.out.println("Print Hollow Inverted Right Triangle Star Pattern");
for (int i = rows; i > 0; i-- )
{
if(i == 1 || i == rows) {
for (int j = 1 ; j <= i; j++ )
{
System.out.print("*");
}
}
else {
for (int k = 1 ; k <= i; k++ ) {
if(k == 1 || k == i) {
System.out.print("*");
}
else {
System.out.print(" ");
}
}
}
System.out.println();
}
}
}
```

11)//full pyramid

```
/* Pyramid program in java to print full pyramid using the symbol *
*/
import java.util.*;
import java.lang.*;
import java.io.*;
public class Main
{
public static void main (String[] args)
{
int i,j,k,rows;
Scanner my_scanner = new Scanner(System.in);
```

```
System.out.println("Enter the number of rows to print symbol * =");
rows = my_scanner.nextInt();
for (i = 1; i <= rows; i++) {
for (j=rows-i; j>=1; j--)
{
System.out.print(" ");
}
for (k=1; k<=i; k++ )
{
System.out.print("* ");
}

System.out.println();
}
}
}
```

12)

```
// Java Program to print
// Right Pascal's Triangle
import java.util.*;

// Java code for printing pattern
public class Main {

// Function to demonstrate pattern
public static void printPattern(int n)
{
int i, j;
int num = 1;

// outer loop to handle upper part
for (i = 1; i <= n; i++) {
// inner loop to print stars
for (j = 1; j <= i; j++) {
System.out.print("* ");
}
```

```
System.out.println();
}

// outer loop to handle lower part
for (i = n-1; i >= 1; i--) {
// inner loop to print stars
for (j = 1; j <= i; j++) {
System.out.print("* ");
}

System.out.println();
}
}

// Driver Function
public static void main(String args[])
{
int n = 4;
printPattern(n);
}
}
```