

Aim:

Write a Java program to print Half Pyramid pattern.

Source Code:**HalfPyramid.java**

```
import java.util.Scanner;
class HalfPyramid
{
    public static void main(String[] args)
    {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter no of rows : ");
        int numRows = scanner.nextInt();
        if (numRows <= 0)
        {
            System.out.println("Number of rows must be a positive integer.");
            return;
        }
        for (int i = 1; i <= numRows; i++)
        {
            for (int j = 1; j <= i; j++)
            {
                System.out.print("* ");
            }
            System.out.println();
        }
    }
}
```

Execution Results - All test cases have succeeded!**Test Case - 1****User Output**

Enter no of rows : 5

*

* *

* * *

* * * *

* * * * *

Test Case - 2**User Output**

Enter no of rows : 3

*

* *

* * *

Test Case - 3
User Output
Enter no of rows : 10
*
* *
* * *
* * * *
* * * * *
* * * * * *
* * * * * * *
* * * * * * * *
* * * * * * * * *
* * * * * * * * *
* * * * * * * * *

Aim:

Write a Program to Print inverted Pyramid Pattern

Source Code:

PyramidRev.java

```
import java.util.Scanner;
class PyramidRev
{
    public static void main(String[] args)
    {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter no of rows : ");
        int numRows = scanner.nextInt();
        if (numRows <= 0)
        {
            System.out. println("Number of rows must be a positive integer.");
            return;
        }
        for (int i = numRows; i >= 1; i--)
        {
            for (int j = 1; j <= numRows - i; j++)
            {
                System.out.print(" ");
            }
            for (int j = 1; j <= i ; j++) {
                System.out.print("* ");
            }
            System.out.println();
        }
    }
}
```

Execution Results - All test cases have succeeded!

Test Case - 1

User Output

Enter no of rows : 5

* * * * *

* * * *

* * *

* *

*

Test Case - 2

User Output

Enter no of rows : 6

* * * * * *

* * * * *

* * * *
* * *
* *
*

Aim:

Write a Program to Print Pyramid Pattern

Source Code:

Pyramid.java

```
import java.util.Scanner;
class Pyramid
{
    public static void main(String[] args)
    {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter no of rows : ");
        int numRows = scanner.nextInt();
        if (numRows <= 0)
        {
            System.out.println("Number of rows must be a positive integer.");
            return;
        }
        for (int i = 1; i <= numRows; i++)
        {
            for (int j = 1; j <= numRows - i; j++)
            {
                System.out.print(" ");
            }
            for (int j = 1; j <= i ; j++)
            {
                System.out.print("* ");
            }
            System.out.println();
        }
    }
}
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
Enter no of rows : 5
<pre> * * * * * * * * * * * * * * *</pre>

Test Case - 2
User Output
Enter no of rows : 6
<pre> *</pre>

* *
* * *
* * * *
* * * * *
* * * * * *

Aim:

Write a Program to Print Hollow Inverted half Pyramid Pattern

Source Code:

HollowHalfPyramidRev.java

```
import java.util.Scanner;
class HollowHalfPyramidRev
{
    public static void main(String[] args)
    {
        Scanner input = new Scanner(System.in);
        System.out.print("Enter no of rows : ");
        int n = input.nextInt();
        int i,j;
        for (i=1; i<=n;i++)
        {
            for (j=n;j>=i;j--)
            {
                if ((j==n)|| (i==j)|| (i==1))
                {
                    System.out.print("* ");
                }
                else
                {
                    System.out.print("  ");
                }
            }
            System.out.print("\n");
        }
    }
}
```

Execution Results - All test cases have succeeded!

Test Case - 1

User Output

Enter no of rows : 5

* * * * *

* *

* *

* *

*

Test Case - 2

User Output

Enter no of rows : 3

* * *

* *

*

Aim:

Write a Program to Print Inverted Half Pyramid Pattern

Source Code:

HalfPyramidRev.java

```
import java.util.Scanner;
class HalfPyramidRev
{
    public static void main(String[] args)
    {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter no of rows : ");
        int numRows = scanner.nextInt();
        if (numRows <= 0)
        {
            System.out.println("Number of rows must be a positive integer.");
            return;
        }
        for (int i = numRows; i >= 1; i--)
        {
            for (int j = 1; j <= i; j++)
            {
                System.out.print("* ");
            }
            System.out.println();
        }
    }
}
```

Execution Results - All test cases have succeeded!**Test Case - 1**

User Output

Enter no of rows : 5

* * * * *

* * * *

* * *

* *

*

Test Case - 2

User Output

Enter no of rows : 3

* * *

* *

*