```java
import java.util.*;

public class Q1{

    public static void printPattern(int n)
    {
        int i, j, k;


        for (i = 1; i <= n; i++) {


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

            for (k = 1; k <= (2 * i - 1); k++) {

                if (k == 1 || i == n || k == (2 * i - 1)) {
                    System.out.print("*");
                }

                else {
                    System.out.print(" ");
                }
            }

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

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

OUTPUT:

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

```java
import java.util.Scanner;

public class Q3
{
    public static void main(String[] args)
    {
        Scanner sc = new Scanner(System.in);



        System.out.println("How many rows you want in this pattern?");

        int rows = sc.nextInt();

        System.out.println("Here is your pattern....!!!");

        int num = 1;

        for (int i = 1; i <= rows; i++)
        {
            for (int j = 1; j <= i; j++)
            {
                System.out.print(num+" ");

                num++;
            }

            System.out.println();
        }



        sc.close();
    }
}
```

OUTPUT:

```
How many rows you want in this pattern?
5
Here is your pattern....!!!
1
2 3
4 5 6
7 8 9 10
11 12 13 14 15
```

```java
import java.util.*;

class Q4{


    public static void printPascal(int n)
    {
        for (int i = 1; i <= n; i++) {
            for (int j = 0; j <= n - i; j++) {


                System.out.print(" ");
            }


            int x = 1;
            for (int k = 1; k <= i; k++) {


                System.out.print(x + " ");
                x = x * (i - k) / k;
            }
            System.out.println();
        }
    }


    public static void main(String[] args)
    {
        int n = 5;
        printPascal(n);
    }
}
```

OUTPUT:

```
     1
    1 1
   1 2 1
  1 3 3 1
 1 4 6 4 1
```

```java
import java.util.*;

public class Q6 {


    public static void printPattern(int n)
    {
        int i, j;

        for (i = 1; i <= n; i++) {


            for (j = 1; j < i; j++) {
                System.out.print(" ");
            }


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


            System.out.println();
        }
    }


    public static void main(String args[])
    {
        int n = 5;
        printPattern(n);
    }
}
```

OUTPUT:

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

```java
import java.util.Scanner;

public class Q23
{
    public static void main(String[] args)
    {
        Scanner sc = new Scanner(System.in);

        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++)
        {
            int num;

            if(i%2 == 0)
            {
                num = 0;

                for (int j = 1; j <= rows; j++)
                {
                    System.out.print(num);

                    num = (num == 0)? 1 : 0;
                }
            }
            else
            {
                num = 1;

                for (int j = 1; j <= rows; j++)
                {
                    System.out.print(num);

                    num = (num == 0)? 1 : 0;
                }
            }

            System.out.println();
        }

        sc.close();
    }
}
```

OUTPUT:

```
How many rows you want in this pattern?
5
Here is your pattern....!!!
10101
01010
10101
01010
10101
```