```java
//Java Program to demonstrate the example of for loop
//which prints table of 1
public class ForExample {
public static void main(String[] args) {
    //Code of Java for loop
    for(int i=1;i<=10;i++){
        System.out.println(i);
    } } }

    //Java Program to demonstrate the use of nested for loop  Statement

public class NestedForExample {
public static void main(String[] args) {
//loop of i
for(int i=1;i<=3;i++){
//loop of j
for(int j=1;j<=3;j++){
        System.out.println(i+" "+j);
}//end of i
}//end of j
}
}
  //Java Program to demonstrate the upward pyramid

public class PyramidExample {
public static void main(String[] args) {
for(int i=1;i<=5;i++){
for(int j=1;j<=i;j++){
        System.out.print("* ");
}
System.out.println();//new line
}
}
}
```

```
//Java Program to demonstrate the downward pyramid

public class PyramidExample2 {
public static void main(String[] args) {
int term=6;
for(int i=1;i<=term;i++){
for(int j=term;j>=i;j--){
        System.out.print("* ");
}
System.out.println();//new line
}
}
}
//Java Program to demonstrate the use of for loop Statement
class FibonacciExample1{
public static void main(String args[])
{
 int n1=0,n2=1,n3,i,count=10;
 System.out.print(n1+" "+n2);//printing 0 and 1
  for(i=2;i<count;++i)//loop starts from 2 because 0 and 1 are already prin
ted
 {
  n3=n1+n2;
  System.out.print(" "+n3);
  n1=n2;
  n2=n3;    } } }
//Java Program to demonstrate the use of break statement
//inside the for loop.
public class BreakExample {
public static void main(String[] args) {
    //using for loop
    for(int i=1;i<=10;i++){
        if(i==5){
            //breaking the loop
            break;
        }
```

```
        System.out.println(i);
    } } }
//Java Program to illustrate the use of break statement
//inside an inner loop
public class BreakExample2 {
public static void main(String[] args) {
        //outer loop
        for(int i=1;i<=3;i++){
            //inner loop
            for(int j=1;j<=3;j++){
                if(i==2&&j==2){
                    //using break statement inside the inner loop
                    break;
                }
                System.out.println(i+" "+j);
            }
  } } }

//Java Program to demonstrate the use of continue statement
//inside the for loop.
public class ContinueExample {
public static void main(String[] args) {
    //for loop
    for(int i=1;i<=10;i++){
        if(i==5){
            //using continue statement
            continue;//it will skip the rest statement
        }
        System.out.println(i);
    } } }
//Java Program to illustrate how to declare, instantiate, initialize
//and traverse the Java array.
class Testarray{
public static void main(String args[]){
int a[]=new int[5];//declaration and instantiation
a[0]=10;//initialization
```

```
a[1]=20;
a[2]=70;
a[3]=40;
a[4]=50;
//traversing array
for(int i=0;i<a.length;i++)//length is the property of array
System.out.println(a[i]);
}}
//Java Program to illustrate the use of declaration, instantiation
//and initialization of Java array in a single line
class Testarray1{
public static void main(String args[]){
int a[]={33,3,4,5};//declaration, instantiation and initialization
//printing array
for(int i=0;i<a.length;i++)//length is the property of array
System.out.println(a[i]);
}}

//Java Program to illustrate the use of multidimensional array
class Testarray3{
public static void main(String args[]){
//declaring and initializing 2D array
int arr[][]={{1,2,3},{2,4,5},{4,4,5}};
//printing 2D array
for(int i=0;i<3;i++){
 for(int j=0;j<3;j++){
   System.out.print(arr[i][j]+" ");
 }
 System.out.println();
}
}}

//Java Program to illustrate the jagged array
class TestJaggedArray{
    public static void main(String[] args){
        //declaring a 2D array with odd columns
```

```
        int arr[][] = new int[3][];
        arr[0] = new int[3];
        arr[1] = new int[4];
        arr[2] = new int[2];
        //initializing a jagged array
        int count = 0;
        for (int i=0; i<arr.length; i++)
            for(int j=0; j<arr[i].length; j++)
                arr[i][j] = count++;

        //printing the data of a jagged array
        for (int i=0; i<arr.length; i++){
            for (int j=0; j<arr[i].length; j++){
                System.out.print(arr[i][j]+" ");
            }
            System.out.println();//new line
        }
    }
}
//Java Program to duplicate the array into another array
public class DuplicateElement {
public static void main(String[] args) {
        //Initialize array
        int [] arr = new int [] {1, 2, 3, 4, 2, 7, 8, 8, 3};
        System.out.println("Duplicate elements in given array: ");
        //Searches for duplicate element
        for(int i = 0; i < arr.length; i++) {
            for(int j = i + 1; j < arr.length; j++) {
                if(arr[i] == arr[j])
                    System.out.println(arr[j]);
            }
        }
    }
}
```

```java
// Java Program to print the elements of an array in reverse order

public class ReverseArray {
    public static void main(String[] args) {
        //Initialize array
        int [] arr = new int [] {1, 2, 3, 4, 5};
        System.out.println("Original array: ");
        for (int i = 0; i < arr.length; i++) {
            System.out.print(arr[i] + " ");
        }
        System.out.println();
        System.out.println("Array in reverse order: ");
        //Loop through the array in reverse order
        for (int i = arr.length-1; i >= 0; i--) {
            System.out.print(arr[i] + " ");
        }
    }
}
//Java Program to print the largest elements of an array.
public class LargestElement_array {
    public static void main(String[] args) {

        //Initialize array
        int [] arr = new int [] {25, 11, 7, 75, 56};
        //Initialize max with first element of array.
        int max = arr[0];
        //Loop through the array
        for (int i = 0; i < arr.length; i++) {
            //Compare elements of array with max
           if(arr[i] > max)
               max = arr[i];
        }
        System.out.println("Largest element present in given array: " + max);
    }
}
```

```java
//Java Program to print the sum of elements of an array.
public class SumOfArray {
    public static void main(String[] args) {
        //Initialize array
        int [] arr = new int [] {1, 2, 3, 4, 5};
        int sum = 0;
        //Loop through the array to calculate sum of elements
        for (int i = 0; i < arr.length; i++) {
          sum = sum + arr[i];
        }
        System.out.println("Sum of all the elements of an array: " + sum);
    }
}
```