Writing a program in Java implementing the binary search algorithm

Program:

import java.util.ArrayList;

import java.util.Collections;

import java.util.List;

// Main class

public class BinarySearch{

// Main driver method

public static void main(String[] args)

{

// Creating an empty ArrayList of integer type

List<Integer> al = new ArrayList<Integer>();

// Populating the Arraylist

al.add(1);

al.add(2);

al.add(3);

al.add(10);

al.add(20);

// 10 is present at index 3

int key = 10;

int res = Collections.binarySearch(al, key);

if (res >= 0)

System.out.println(

key + " found at index = " + res);

else

System.out.println(key + " Not found");

key = 15;

res = Collections.binarySearch(al, key);

if (res >= 0)

System.out.println(

key + " found at index = " + res);

else

System.out.println(key + " Not found");

}

}

Output:

10 found at index = 3

15 Not found