* Write a Binary search program to search the elements of the integer Array.

**import java.util.Scanner;**

**public class BinarySearch {**

**public static void main(String[] args) {**

**Scanner sc = new Scanner(System.in);**

**System.out.println("Enter the size: ");**

**int num = sc.nextInt();**

**int arr[] = new int[num];**

**System.out.print("Enter " + num + " integers:");**

**for (int count = 0; count < num; count++)**

**arr[count] = sc.nextInt();**

**System.out.println("Enter a number to search: ");**

**int item = sc.nextInt();**

**int a = 0;**

**int c = num - 1;**

**int b = (a + c) / 2;**

**while (a <= c) {**

**if (arr[b] < item)**

**a = b + 1;**

**else if (arr[b] == item) {**

**System.out.println(item + " found in position**

**at: " + (b + 1) + ".");**

**break;**

**} else {**

**a = b - 1;**

**}**

**b = (a + c) / 2;**

**}**

**if (a > c)**

**System.out.println(item + " is not found");**

**}**

**}**