

Java program for linear search - Example

BY CHAITANYA SINGH | FILED UNDER: [JAVA EXAMPLES](#)

Example Program:

This program uses [linear search algorithm](#) to find out a number among all other numbers entered by user.

```
/* Program: Linear Search Example
 * Written by: Chaitanya from beginnersbook.com
 * Input: Number of elements, element's values, value to be searched
 * Output: Position of the number input by user among other numbers*/
import java.util.Scanner;
class LinearSearchExample
{
    public static void main(String args[])
    {
        int counter, num, item, array[];
        //To capture user input
        Scanner input = new Scanner(System.in);
        System.out.println("Enter number of elements:");
        num = input.nextInt();
        //Creating array to store the all the numbers
        array = new int[num];
        System.out.println("Enter " + num + " integers");
        //Loop to store each numbers in array
        for (counter = 0; counter < num; counter++)
            array[counter] = input.nextInt();

        System.out.println("Enter the search value:");
        item = input.nextInt();

        for (counter = 0; counter < num; counter++)
        {
            if (array[counter] == item)
            {
                System.out.println(item+" is present at location "+(counter+1));
                /*Item is found so to stop the search and to come out of the
                 * loop use break statement.*/
                break;
            }
        }
        if (counter == num)
            System.out.println(item + " doesn't exist in array.");
    }
}
```

Output 1:

```
Enter number of elements:
6
Enter 6 integers
22
33
45
```

```
1
3
99
Enter the search value:
45
45 is present at location 3
```

Output 2:

```
Enter number of elements:
4
Enter 4 integers
11
22
4
5
Enter the search value:
99
99 doesn't exist in array.
```