**Java program for linear search – Example**

**Example Program:**

This program uses [linear search algorithm](http://en.wikipedia.org/wiki/Linear_search) to find out a number among all other numbers entered by user.

/\* Program: Linear Search Example

\* 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.