



**EAST WEST UNIVERSITY**

## **Lab Report-1**

**Course Code-**CSE 207

**Section-**03

**Program Name:** A program to search an element using Linear Search.

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**Search Class:**

```

package Linear_Search;

public class Search {

    //member variable

    int[] data;
    //constructor
    public Search(int[] data) {
        this.data=data;
    }
    public void linearSearch(int item) {
        boolean found=false;

        int location=-1;

        for (int i=0;i<data.length;i++) {

            if(item== data[i]) {

                found=true;

                location=i;

                break;

            }
        }

        if (found==true) {

            System.out.println(location);

        }

        else {

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

        }

    }
}

```

## Main Class:

```

package Linear_Search;

```

```
import java.util.Scanner;

public class Main {

    public static void main(String[] args) {

        Scanner input = new Scanner(System.in);
        int[] data = new int[10];
        System.out.println("Enter the values");

        for(int i =0;i<data.length;i++) {

            data[i] =input.nextInt();

        }

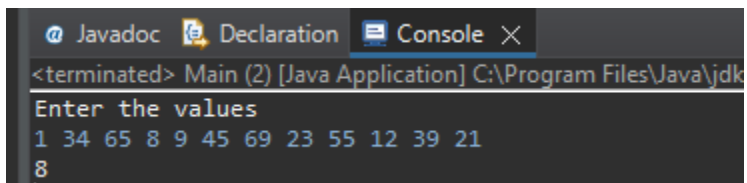
        Search ob = new Search(data);

        ob.linearSearch(55);

    }

}
```

## Output:



The screenshot shows a Java IDE with three tabs: Javadoc, Declaration, and Console. The Console tab is active, displaying the output of the program. The output starts with the prompt "Enter the values", followed by a line of ten integers: "1 34 65 8 9 45 69 23 55 12 39 21". Below this, the number "8" is displayed, which is the result of the linear search for the value 55. The console window title bar indicates the application is "Main (2) [Java Application]" and the path is "C:\Program Files\Java\jdk".

```
<terminated> Main (2) [Java Application] C:\Program Files\Java\jdk
Enter the values
1 34 65 8 9 45 69 23 55 12 39 21
8
```