

Writing a program in Java implementing the linear search algorithm

```
package P5;

import java.util.Scanner;

public class LinearSearch {

    public static void main(String[] args) {

        int[] arr = { 1, 2, 3, 4, 5 };

        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the element to be searched");
        int searchValue = sc.nextInt();
        int result = (int) linearing(arr, searchValue);

        if (result == 1) {

            System.out.println("Element not in the array");
        } else {

            System.out.println("Element found at " + result + " and the
search key is " + arr[result]);
        }
    }

    public static int linearing(int arr[], int x) {

        int arrlength = arr.length;
        for (int i = 0; i < arrlength - 1; i++) {

            if (arr[i] == x) {

                return i;

            }
        }

        return 1;
    }
}
```

