

Assignment-5

Implement a Java method that performs a linear search on an array of integers, returning the index of the target value if found or -1 if not.

```
package datastructures.searchingAlgorithms;

import java.util.Scanner;

public class LinearSearchDemo {

    public static int linearSearch(int[] a,int ele) {
        for(int i=0;i<a.length;i++) {
            if(a[i]==ele) {
                return i;
            }
        }
        return -1;
    }

    public static void main(String[] args) {

        int arr[] = {4,3,6,2,5,7,};
        Scanner sc=new Scanner(System.in);
        System.out.print("Enter element to Search : 5");
        int target=sc.nextInt();
        int result=linearSearch(arr,target);
        if(result!=-1)
            System.out.println("Element found at index :
"+result);
        else
            System.out.println("Element not found");

    }
}
```

}