------------------------------------JAVA---------------------------------------------

---------------------------------LINEAR SEARCH--------------------------------

public class linear\_search  
{  
 public static void main(String[] args)  
 {  
 int[] a={10,20,30,40,50};  
 int target=40;  
 System.*out*.println(*linear*(a,target));  
 }  
  
 static int linear(int[] a, int target) {  
 for(int i=0;i<a.length;i++)  
 {  
 if(target==a[i])  
 {  
 return i;  
 }  
 }  
 return -1;  
 }  
}

------------------------------- BINARY SEARCH--------------------------------

public class binary\_search {  
  
 public static void main(String[] args) {  
 int[] a={10,20,30,40,50};  
 int target=40;  
 System.*out*.println(*binary*(a,target));  
 }  
  
 static int binary(int[] a, int target)  
 {  
 //length is 0  
 if(a.length == 0)  
 {  
 return -1;  
 }  
 int start=0;  
 int end= a.length-1;  
 while (start<=end)  
 {  
 int mid= (start +end)/2 ;  
 if(target<a[mid])  
 {  
 end=mid-1;  
 }  
 else if(target>a[mid])  
 {  
 start=mid+1;  
 }  
 else {  
 return mid;  
 }  
  
 }  
 return -1;  
 }  
}