

1)LINEAR SEARCH:

One of the most straightforward and elementary searches is the sequential search, also known as a linear search

```
public class Main
{
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the size of list:");
        int n=sc.nextInt();
        System.out.println("Enter the elements:");
        int a[]=new int[n];
        for(int i=0;i<n;i++)
        {
            a[i]=sc.nextInt();
        }
        int x;
        System.out.println("Enter the element to search:");
        x=sc.nextInt();
        int flag=0;
        int i=0;
        while(flag==0 && i<n)
        {
            if(a[i]==x)
            {
                flag=1;
            }
            i++;
        }
        if(flag==1)
            System.out.println("The element found at "+i+" th position");
        else
            System.out.println("Not found");
    }
}
```

OUTPUT:

Enter the size of list:

5

Enter the elements:

4 2 7 8 9

Enter the element to search:

8

The element found at 4 th position