

```

1 //Linear Search without functions
2 #include<stdio.h>
3 int main()
4 { int i,n,x,a[15],flag=0;
5     printf("\nEnter the total no. of elements
        in array:");
6     scanf("%d",&n);
7     printf("\nEnter array elements:");
8     for( i=0;i<n;i++)
9         scanf("%d",&a[i]);
10    printf("\nEnter element to be search:");
11    scanf("%d",&x);
12    for(i=0;i<n;i++)
13        { if(a[i]==x)
14            { printf("\nElement present at %d",i+1
15                );
16                flag++;
17            }
18        }
19    if(flag==0)
20        printf("\nElement not present in array");
21    return 0;
22 }

```

```

Enter the total no. of elements in array:7
Enter array elements:12 23 34 45 56 68 89
Enter element to be search:34
Element present at 3

```

```

1 //Linear Search using functions
2 #include<stdio.h>
3 void search(int a[],int x,int n);
4 void main()
5 { int i,n,x,a[15];
6   printf("\nEnter the total no. of elements
       in array:");
7   scanf("%d",&n);
8   printf("\nEnter array elements:");
9   for( i=0;i<n;i++)
10    scanf("%d",&a[i]);
11   printf("\nEnter element to be search:");
12   scanf("%d",&x);
13   search(a,x,n);
14
15 }
16 void search(int a[],int x,int n)
17 { int flag=0,i;
18   for(i=0;i<n;i++)
19   { if(a[i]==x)
20     { printf("\nElement present at %d",i+1
        );
21     flag++;
22   }
23 }
24 if(flag==0)
25 printf("\nElement not present in array");
26
27 }

```

```

Enter the total no. of elements in array:5
Enter array elements:12 23 34 45 56
Enter element to be search:45
Element present at 4

```

```

1 //Linear Searching functions
2 #include<stdio.h>
3 void search(int a[],int x,int n);
4 void main()
5 { int i,n,x,a[15];
6   printf("\nEnter the total no. of elements
       in array:");
7   scanf("%d",&n);
8   printf("\nEnter array elements:");
9   for( i=0;i<n;i++)
10    scanf("%d",&a[i]);
11   printf("\nEnter element to be search:");
12   scanf("%d",&x);
13   search(a,x,n);
14
15 }
16 void search(int a[],int x,int n)
17 { int flag=0,i;
18   for(i=0;i<n;i++)
19   { if(a[i]==x)
20     { printf("\nElement present at %d",i+1
        );
21       flag++;
22     }
23   }
24   if(flag==0)
25     printf("\nElement not present in array");
26
27 }

```

```

Enter the total no. of elements in array:5
Enter array elements:12 23 34 45 56
Enter element to be search:23
Element present at 2

```