```c
/********* LINEAR SEARCH **********/

#include <stdio.h>
#include <conio.h>
void main()
{
  int a[10],n,m,i;
  clrscr();
  printf("Enter number of elements : ");
  scanf("%d",&n);
  printf("Enter Array Elements\n");
  for(i=0;i<n;++i)
     scanf("%d",&a[i]);
  printf("Enter the number to be searched : ");
  scanf("%d",&m);
  for(i=0;i<n;++i)
  {
    if (a[i]==m)
       break;
  }
  if (i==n)
     printf("Number %d is not available",m);
  else
    printf("Number %d is at %dth position",m,i);
  getch();
}
```

```c
/***Linear Search with Recursion ***/

#include<stdio.h>
#include<conio.h>
void search(int a[],int i,int m)
{
        if (a[i]==m)
                printf("%d is found",m);
         else if(i<0)
                printf("%d is not found",m);
         else
                search(a,--i,m);
}

void main()
{
        int a[10],n,i,m;
        clrscr();
        printf("Enter number of elements : ");
        scanf("%d",&n);
        printf("Enter array elements\n");
        for(i=0;i<n;++i)
                scanf("%d",&a[i]);
        printf("Enter number to be searched : ");
        scanf("%d",&m);
        search(a,n-1,m);
        getch();
}
```

```c
/**** BINARY SEARCH ****/

#include <stdio.h>
#include <conio.h>
void main()
{
        int a[10],n,i,j,t,m,low,high,mid;
        clrscr();
        printf("Enter number of elements : ");
        scanf("%d",&n);
        printf("Enter Array Elements\n");
        for(i=0;i<n;++i)
                scanf("%d",&a[i]);
        printf("Enter number to be searched : ");
        scanf("%d",&m);
        for(i=0;i<n;++i)
                for(j=i+1;j<n;++j)
                        if(a[i]>a[j])
                        {
                                t=a[i];
                                a[i]=a[j];
                                a[j]=t;
                        }
        low=0;
        high=n-1;
        while(low<=high)
        {
                mid=(low+high)/2;
                if (m==a[mid])
                        break;
                else if (m>a[mid])
                        low=mid+1;
                else
                        high=mid-1;
        }
        if (low>high)
                printf("%d is not found",m);
        else
                printf("%d is found",m);
        getch();
}
```

```c
/***** BINARY SEARCH with RECURSION *****/

#include <stdio.h>
#include <conio.h>
void search(int a[],int m,int low,int high)
{
        int mid,t;
        if (low>high)
                prinf("%d is not found",m);
        else
        {
                mid=(high+low)/2;
                if (m==a[mid])
                        printf("%d is found",m);
                else if (m<a[mid])
                        search(a,m,low,mid-1);
                else
                        search(a,m,mid+1,high);
        }
}
void main()
{
        int a[10],n,i,j,t,m,low,high,mid;
        clrscr();
        printf("Enter number of elements : ");
        scanf("%d",&n);
        printf("Enter Array Elements\n");
        for(i=0;i<n;++i)
                scanf("%d",&a[i]);
        printf("Enter number to be searched : ");
        scanf("%d",&m);
        for(i=0;i<n;++i)
                for(j=i+1;j<n;++j)
                 if(a[i]>a[j])
                 {
                        t=a[i];
                        a[i]=a[j];
                        a[j]=t;
                 }
        low=0;
        high=n-1;
        search(a,m,low,high);
        getch();
}
```