```c
#include <stdio.h>
#include <stdlib.h>
#define max 100
void binsearch(int a[],int low,int high,int mid,int key);
void main()
{
  int a[max];
  int low,mid,high;
  int n,i,key;
  printf("read n:");
  scanf("%d",&n);
  printf("read the elements:");
  for(i=0;i<n;i++)
  {
    scanf("%d",&a[i]);
  }
  low=0;
  high=n-1;
  mid=(low+high)/2;
  printf("enter the key element:");
  scanf("%d",&key);
  binsearch(a,low,high,mid,key);


}
void binsearch(int a[],int low,int high,int mid,int key)
{
  while(low<=high)
  {
    if(a[mid]==key)
    {
```

```c
      printf("elment found at %d ",mid+1);

      exit(0);

   }

   else if(a[mid]>key)

   {

     high=mid-1;

   }

   else

   {

     low=mid+1;

   }

   mid=(low+high)/2;


 }

 printf("element not found");

}
```

Output:

```
read n:5
read the elements:1 2 3 4 5
enter the key element:4
elment found at 4
```