

PROGRAM-2 BINARY SEARCH IN AN ARRAY DATED 09-08-2012

```
#include<iostream.h>
#include<conio.h>
void main()
{
    clrscr();
    int a[100] , num , item , beg=0;
    cout<<"enter the number of elements in an array"<<endl;
    cin>>num;
    cout<<"enter the elements of an array in sorted order"<<endl;
    for(int i=0;i<num;i++)
    cin>>a[i];
    cout<<"enter the element to search"<<endl;
    cin>>item;
    int last=num-1;
    i=0;
    while(beg<=last)
    {
        int mid=(beg+last)/2;

        if(a[mid]==item)
        {
            cout<<"element is found at "<<mid+1<<endl;
            break;
        }
        else if(a[mid]<item)
            beg=mid+1;
        else
            last=mid-1;
    }
    if(beg>last)
        cout<<"element is not found";
    getch();
}
```

```
enter the number of elements in an array
5
enter the elements of an array in sorted order
7
9
11
23
45
enter the element to search
23
element is found at 4
_
```

