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#include<stdio.h>
void sort(int arr[],int count)
{
    int temp;
    for(int i=0;i<count;i++)
    {
        for(int j=i;j<count;j++)
        {
            if(arr[i]>arr[j])
            {
                temp = arr[i];
                arr[i] = arr[j];
                arr[j] =temp;
            }
        }
    }
}
int Binary_search(int arr[],int count,int search)
{
    int first =0 ,last= count-1, mid;
    while(first<=last)
    {
        mid = (first+last)/2;
        if(search == arr[mid])
        {
            return mid;
        }
        else if(search>arr[mid])
        {
            first = mid+1;
        }
        else{
            last = mid-1;
        }
    }
    return -1;
}

void main()
{
    int arr[100];
    int count,search,index;
    printf("Enter total no of elements\n");
    scanf("%d",&count);
    for(int i =0;i<count;i++)
    {
        scanf("%d",&arr[i]);
    }
    sort(arr,count);
    printf("Sorted elements are:=>\n");
    for(int i=0;i<count;i++)
    {
        printf("%d ",arr[i]);
    }
    printf("Enter element to search\n");
    scanf("%d",&search);
    index = Binary_search(arr,count,search);
    if(index == -1)
    {
        printf("Element not Found\n");
    }
    else
    {
        printf("NUmber is found at index %d ",index);
    }
}
```