

/*bianary search by func*/

```
#include<stdio.h>
```

```
void search(int a[],int n1);
```

```
int main()
```

```
{
```

```
    int n,i,temp,j;
```

```
    printf("enter the value of n\n");
```

```
    scanf("%d",&n);
```

```
    int a[n];
```

```
    printf("enter the values of array\n");
```

```
    for(i=0;i<n;i++)
```

```
    {
```

```
        scanf("%d",&a[i]);
```

```
    }
```

```
    for(i=0;i<n;i++)
```

```
    {
```

```
        for(j=i+1;j<n;j++)
```

```
        {
```

```
            if(a[i]>a[j])
```

```
            {
```

```
                temp=a[i];
```

```
                a[i]=a[j];
```

```
                a[j]=temp;
```

```
            }
```

```
        }
```

```
    }
```

```
    printf("sorted array\n");
```

```
    for(i=0;i<n;i++)
```

```
    {
```

```
        printf("%d\n",a[i]);
```

```
    }
```

```

search(a,n);
return 0;
}
void search(int a1[],int n1)

{
    int mid,key,first,last,i;
    first=0;
last=n1-1;
printf("enter the value of key\n");
scanf("%d",&key);
mid=(first+last)/2;
while (first<=last)
{
    if(a1[mid]<key)
    {
        first=mid+1;
    }
    else if(a1[mid]==key)
    {
        printf("%d is found at aposition %d\n",key,mid+1);
        break;
    }
    else
    {
        last=mid-1;
        mid=(first+last)/2;
    }
    mid=(first+last)/2;
    if(first>last)
    {

```

```
printf("value not found");
```

```
}
```

```
}
```

```
}
```

```
C:\Users\HP\OneDrive\Desktop\collage work 3rd sem(dada)\binary search func.exe
enter the value of n
5
enter the values of array
12
68
0
42
59
sorted array
3
12
42
59
68
enter the value of key
42
42 is found at aposition 3
-----
Process exited after 17.2 seconds with return value 0
Press any key to continue . . .
```