

⇒ Solved Problem---

```
#include<iostream>
```

```
using namespace std;
```

```
int binarySearch(int *arr, int key, int start, int end)
```

```
{
```

```
    int mid = (start+end)/2;
```

```
    for(int i = start; i<end; i++){
```

```
        if(arr[mid] == key)
```

```
        {
```

```
            return mid;
```

```
            break;
```

```
        }
```

```
        else if(arr[mid] < key)
```

```
        {
```

```
            mid++;
```

```
        }
```

```
        else if(arr[mid]>key){
```

```
        mid--;
    }
    else{
        return 0;
    }
}

}

int main()
{
    int n, key;

    cout<<"Enter the size of the array and value"<<endl;
    cin>>n>>key;

    int arr[n];

    cout<<"Enter the Elements"<<endl;
    for(int i = 0; i<n; i++){

        cin>>arr[i];
    }
```

```
int result = binarySearch(arr,key, 0, n);  
  
cout<<"Your value is found at index::"<<result;  
  
return 0;  
  
}
```

Output—

```
Enter the size of the array and value  
7 5  
Enter the Elements  
2 3 5 7 8 9 10  
Your value is found at index:2  
-----  
Process exited after 36.03 seconds with return value 0  
Press any key to continue . . .
```