

```
In [1]: ls = [1,2,4,5,45,22,87,27,64,0,32]
```

```
In [2]: sorted_ls = ls.sort()
```

```
In [3]: print(ls)
```

```
[0, 1, 2, 4, 5, 22, 27, 32, 45, 64, 87]
```

```
In [8]: ele = 4  
start = 0  
end = len(ls)-1
```

```
In [9]: print(ls[start])
```

```
0
```

```
In [10]: print(ls[end])
```

```
87
```

```
In [11]: while start <= end:  
    mid = (start + end)//2  
  
    if ls[mid] < ele:  
        start = mid + 1  
  
    elif ls[mid] > ele:  
        end = mid - 1  
    else:  
        print("Element found at index",mid)  
        break  
  
else:  
    print("Element not found")
```

```
Element found at index 3
```