

### 35.Search Insert Position

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

```
/* Function to find search insert position */
```

```
int searchInsert(int nums[], int n, int target) {
```

```
    int left = 0, right = n - 1, mid;
```

```
    while (left <= right) {
```

```
        mid = (left + right) / 2;
```

```
        if (nums[mid] == target)
```

```
            return mid;
```

```
        else if (nums[mid] < target)
```

```
            left = mid + 1;
```

```
        else
```

```
            right = mid - 1;
```

```
    }
```

```
    /* left is the insertion position */
```

```
    return left;
```

```
}
```

```
int main() {
```

```
    int nums[100], n, target, i;
```

```
    printf("Enter number of elements: ");
```

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

```
    printf("Enter sorted array elements:\n");
```

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

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

```

}

printf("Enter target value: ");

scanf("%d", &target);

printf("Index: %d\n", searchInsert(nums, n, target));

return 0;
}

```

OUTPUT:

```

Microsoft Windows [Version 10.0.26200.7462]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Mohammed Javeed\OneDrive\Desktop\Javeed\Leetcode_Problems>cd "c:\Users\Mohammed Javeed\OneDrive\Desktop\Javeed\Leetcode_Problems\" && gcc 03_SearchInsertPosition.c -o 03_SearchInsertPosition &
Enter number of elements: 4
Enter sorted array elements:
1 3 5 6
Enter target value: 5
Index: 2

C:\Users\Mohammed Javeed\OneDrive\Desktop\Javeed\Leetcode_Problems>cd "c:\Users\Mohammed Javeed\OneDrive\Desktop\Javeed\Leetcode_Problems\" && gcc 03_SearchInsertPosition.c -o 03_SearchInsertPosition &
Enter number of elements: 4
Enter sorted array elements:
1 3 4 6
Enter target value: 2
Index: 1

C:\Users\Mohammed Javeed\OneDrive\Desktop\Javeed\Leetcode_Problems>cd "c:\Users\Mohammed Javeed\OneDrive\Desktop\Javeed\Leetcode_Problems\" && gcc 03_SearchInsertPosition.c -o 03_SearchInsertPosition &
Enter number of elements: 4
Enter sorted array elements:
1 3 4 6
Enter target value: 7
Index: 4

C:\Users\Mohammed Javeed\OneDrive\Desktop\Javeed\Leetcode_Problems>

```