

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

```
int binarySearch(int nums[], int n, int target)
```

```
{
```

```
    int low = 0, high = n - 1;
```

```
    while (low <= high)
```

```
    {
```

```
        int mid = (low + high)/2;
```

```
        if (target == nums[mid]) {  
            return mid;
```

```
        }
```

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

```
            high = mid - 1;
```

```
        }
```

```
        else {
```

```
            low = mid + 1;
```

```
        }
```

```
    }
```

```
    return -1;
```

```
}
```

```
int main(void)
```

```
{
```

```
    int nums[] = { 2, 5, 6, 8, 9, 10 };
```

```
    int target = 5;
```

```
    int n = sizeof(nums)/sizeof(nums[0]);
```

```
    int index = binarySearch(nums, n, target);
```

```
    if (index != -1) {
```

```
        printf("Element found at index %d", index);
```


```
    }
```

```
    else {
```

```
        printf("Element not found in the array");
```

```
    }
```

```
    return 0;
```



```
Element found at index 1  
  
...Program finished with exit code 0  
Press ENTER to exit console.
```

}