

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

```
int binarySearch(int arr[], int left, int right, int target) {  
    while (left <= right) {  
        int mid = left + (right - left) / 2;  
  
        if (arr[mid] == target)  
            return mid;  
  
        if (arr[mid] < target)  
            left = mid + 1;  
        else  
            right = mid - 1;  
    }  
  
    return -1; // Not found  
}
```

```
int main() {  
    int arr[] = {2, 4, 6, 8, 10, 12, 14, 16};  
    int n = sizeof(arr) / sizeof(arr[0]);  
    int target = 10;  
    int result = binarySearch(arr, 0, n - 1, target);  
  
    if (result == -1)  
        printf("Element not found\n");  
    else  
        printf("Element found at index: %d\n", result);  
  
    return 0;  
}
```