

## 7

```
#include <stdio.h>
int binarySearch(int arr[], int left, int right, int element) {
    while (left <= right) {
        int mid = left + (right - left) / 2;
        if (arr[mid] == element) {
            return mid;
        }
        if (arr[mid] < element) {
            left = mid + 1;
        }
        else {
            right = mid - 1;
        }
    }
    return -1;
}
int main() {
    int array[] = {12, 24, 36, 48, 60, 72, 84};
    int size = sizeof(array) / sizeof(array[0]);
    int searchElement;
    printf("Enter the element to search: ");
    scanf("%d", &searchElement);
    int result = binarySearch(array, 0, size - 1, searchElement);
    if (result != -1) {
        printf("Element %d found at index %d.\n", searchElement, result);
    } else {
        printf("Element %d not found in the array.\n", searchElement);
    }
    return 0;
}
```

```
Enter the element to search: 90
Element 90 not found in the array.
```