// Binary Search in C++

#include <iostream>

using namespace std;

int binarySearch(int array[], int x, int low, int high) {

// Repeat until the pointers low and high meet each other

while (low <= high) {

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

if (array[mid] == x)

return mid;

if (array[mid] < x)

low = mid + 1;

else

high = mid - 1;

}

return -1;

}

int main(void) {

int array[] = {3, 4, 5, 6, 7, 8, 9};

int x = 4;

int n = sizeof(array) / sizeof(array[0]);

int result = binarySearch(array, x, 0, n - 1);

if (result == -1)

printf("Not found");

else

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

}