2Binary Search

#include <stdio.h>

#include <stdbool.h>

int main() {

int m, n = 0, s, a[20], temp, i, j;

printf("Enter the number of elements (up to 20): ");

if (scanf("%d", &s) != 1 || s <= 0 || s > 20) {

printf("Invalid input for the number of elements.\n");

return 1;

}

printf("Enter the target element: ");

if (scanf("%d", &m) != 1) {

printf("Invalid input for the target element.\n");

return 1;

}

printf("Enter the array elements: ");

for (i = 0; i < s; i++) {

if (scanf("%d", &a[i]) != 1) {

printf("Invalid input for array element at index %d.\n", i);

return 1;

}

}

for (i = 0; i < s; i++) {

for (j = i + 1; j < s; j++) {

if (a[i] > a[j]) {

temp = a[i];

a[i] = a[j];

a[j] = temp;

}

}

}

for (i = 0; i < s; i++)

{

if (a[i] == m)

{

n = 1;

printf("Target found at position a[%d]\n", i);

break;

}

}

if (n == 1)

{

printf("Successful.\n");

}

else

{

printf("Target not found.\n");

}

return 0;

}

OUTPUT

