Started on	Tuesday, 3 September 2024, 2:13 PM
State	Finished
Completed on	Tuesday, 3 September 2024, 2:32 PM
Time taken	18 mins 40 secs
Marks	1.00/1.00
Grade	**10.00** out of 10.00 (**100**%)

Question **1**

Correct

Mark 1.00 out of 1.00

Assume you are an awesome parent and want to give your children some cookies. But, you should give each child at most one cookie.

Each child i has a greed factor g[i], which is the minimum size of a cookie that the child will be content with; and each cookie j has a size s[j]. If s[j] >= g[i], we can assign the cookie j to the child i, and the child i will be content. Your goal is to maximize the number of your content children and output the maximum number.

Example 1:

Input:

3

1 2 3

2

1 1

Output:

1

Explanation: You have 3 children and 2 cookies. The greed factors of 3 children are 1, 2, 3.

And even though you have 2 cookies, since their size is both 1, you could only make the child whose greed factor is 1 content.

You need to output 1.

Constraints:

1 <= g.length <= 3 * 10^4

0 <= s.length <= 3 * 10^4

1 <= g[i], s[j] <= 2^31 - 1

Answer: (penalty regime: 0 %)

```c
#include <stdio.h>
#include <stdlib.h>
int cmp(const void *a, const void *b) {
    return (*(int*)a - *(int*)b);
}
int findContentChildren(int* g, int gSize, int* s, int sSize) {
    qsort(g, gSize, sizeof(int), cmp);
    qsort(s, sSize, sizeof(int), cmp);
    int i = 0, j = 0;
    while (i < gSize && j < sSize) {
        if (s[j] >= g[i]) {
            i++;
        }
        j++;
    }
    return i;
}
int main() {
    int gSize, sSize;
    scanf("%d", &gSize);
    int* g = (int*)malloc(gSize * sizeof(int));
    for (int i = 0; i < gSize; i++) {
        scanf("%d", &g[i]);
    }
    scanf("%d", &sSize);
    int* s = (int*)malloc(sSize * sizeof(int));
    for (int i = 0; i < sSize; i++) {
        scanf("%d", &s[i]);
    }
    int result = findContentChildren(g, gSize, s, sSize);
    printf("%d\n", result);
    free(g);
    free(s);
    return 0;
}

```

	Input	Expected	Got	
✓	2 1 2 3 1 2 3	2	2	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

◄ 1-G-Coin Problem

Jump to...

3-G-Burger Problem ►