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<b>Started on</b>	Tuesday, 27 August 2024, 12:30 PM
<b>State</b>	Finished
<b>Completed on</b>	Tuesday, 27 August 2024, 12:33 PM
<b>Time taken</b>	3 mins 19 secs
<b>Marks</b>	1.00/1.00
<b>Grade</b>	<b>10.00</b> out of 10.00 ( <b>100%</b> )

## 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  $s[j] \geq g[i]$ , 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:**
 $1 \leq g.length \leq 3 \times 10^4$ 
 $0 \leq s.length \leq 3 \times 10^4$ 
 $1 \leq g[i], s[j] \leq 2^{31} - 1$ 
**Answer:** (penalty regime: 0 %)

```
1 #include <stdio.h>
2 #include <stdlib.h>
3
4 int compare(const void *a, const void *b) {
5     return (*(int *)a - *(int *)b);
6 }
7
8 int findContentChildren(int* g, int gSize, int* s, int sSize) {
9     qsort(g, gSize, sizeof(int), compare);
10    qsort(s, sSize, sizeof(int), compare);
11
12    int child = 0, cookie = 0;
13
14    while (child < gSize && cookie < sSize) {
15        if (s[cookie] >= g[child]) {
16            child++;
17        }
18        cookie++;
19    }
20
21    return child;
22 }
23
24 int main() {
25     int gSize;
26     scanf("%d", &gSize);
27
28     int g[gSize];
29     for (int i = 0; i < gSize; i++) {
30         scanf("%d", &g[i]);
31     }
```

```
32 |  
33 |     int sSize;  
34 |     scanf("%d", &sSize);  
35 |  
36 |     int s[sSize];  
37 |     for (int i = 0; i < sSize; i++) {  
38 |         scanf("%d", &s[i]);  
39 |     }  
40 |  
41 |     int result = findContentChildren(g, gSize, s, sSize);  
42 |     printf("%d\n", result);  
43 |  
44 |     return 0;  
45 | }
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

◀ 1-G-Coin Problem

Jump to...

3-G-Burger Problem ▶