

2-G-Cookies Problem

Started on	Friday, 29 August 2025, 1:49 PM
State	Finished
Completed on	Sunday, 31 August 2025, 3:27 PM
Time taken	2 days 1 hour
Marks	1.00/1.00
Grade	10.00 out of 10.00 (100%)

Question 1 | [Correct](#) [Mark 1.00 out of 1.00](#) [Flag question](#)

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:

$1 \leq g.length \leq 3 \cdot 10^4$

$0 \leq s.length \leq 3 \cdot 10^4$

$1 \leq g[i], s[j] \leq 2^{31} - 1$

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    int contentChildren = 0;
12
13    for(int i=0;i<gSize;i++){
14        for(int j=0;j<sSize;j++){
15            if(s[j]>=g[i]){
16                contentChildren++;
17                break;
18            }
19        }
20    }
21
22    return contentChildren;
23 }
24
25 int main() {
26     int gSize, sSize;
27
28     scanf("%d", &gSize);
29     int *g = (int*)malloc(gSize * sizeof(int));
30     for (int i = 0; i < gSize; i++) {
31         scanf("%d", &g[i]);
32     }
33
34     scanf("%d", &sSize);
35     int *s = (int*)malloc(sSize * sizeof(int));
36     for (int i = 0; i < sSize; i++) {
37         scanf("%d", &s[i]);
38     }
39
40     int result = findContentChildren(g, gSize, s, sSize);
41     printf("%d\n", result);
42
43     free(g);
44     free(s);
45     return 0;
46 }
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

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