RAJALAKSHMI ENGINEERING COLLEGE

RAGAVI N 2024-CSE ⌄   **R2**

Started on	Sunday, 31 August 2025, 10:13 AM
State	Finished
Completed on	Sunday, 31 August 2025, 10:13 AM
Time taken	13 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
1   #include <stdio.h>
2   #include <stdlib.h>
3
4   // Comparison function for qsort
5   int compare(const void *a, const void *b) {
6       return (*(int *)a - *(int *)b);
7   }
8
9   // Function to find the maximum number of content children
10  int findContentChildren(int* g, int gSize, int* s, int sSize) {
11      // Sort greed factors and cookie sizes
12      qsort(g, gSize, sizeof(int), compare);
13      qsort(s, sSize, sizeof(int), compare);
14
15      int i = 0, j = 0; // i for children, j for cookies
16      int contentChildren = 0;
17
18      while (i < gSize && j < sSize) {
19          if (s[j] >= g[i]) {
20              contentChildren++;
21              i++;
22          }
23          j++;
24      }
25
26      return contentChildren;
27  }
28
29  int main() {
30      int gSize, sSize;
31
32      // Read number of children
33      scanf("%d", &gSize);
34      int g[gSize];
35      for (int i = 0; i < gSize; i++) {
36          scanf("%d", &g[i]);
37      }
38
```

```
38
39        // Read number of cookies
40        scanf("%d", &sSize);
41        int s[sSize];
42 ▾      for (int i = 0; i < sSize; i++) {
43            scanf("%d", &s[i]);
44        }
45
46        // Compute and print result
47        int result = findContentChildren(g, gSize, s, sSize);
48        printf("%d\n", result);
49
50        return 0;
51  }
```

	Input	Expected	Got	
✔	2 1 2 3 1 2 3	2	2	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Back to Course