<u>Dashboard</u> / <u>My courses</u> / <u>CS23331-DAA-2023-CSE</u> / <u>Greedy Algorithms</u> / <u>2-G-Cookies Problem</u>

Started on	Tuesday, 27 August 2024, 2:44 PM
State	Finished
Completed on	Monday, 7 October 2024, 7:57 PM
Time taken	41 days 5 hours
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:

3 123

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[i] <= 2^31 - 1
```

Answer: (penalty regime: 0 %)

```
#include <stdio.h>
 2 v int main(){
        int n1,n2,count=0,ptr1=0,ptr2=0;
 3
        scanf("%d",&n1);
 4
 5
        int children[n1];
 6
        for(int i=0; i<n1; i++) scanf("%d", &children[i]);</pre>
 7
         scanf("%d", &n2);
 8
         int cookies[n2];
9
        for(int i=0; i<n2; i++) scanf("%d", &cookies[i]);</pre>
10
        while(ptr1 < n1 && ptr2 < n2){</pre>
             if(cookies[ptr1] >= children[ptr2]){
11
12
                 count++;
13
                 ptr1++;
14
                 ptr2++;
15
             }
16
        }
17
        printf("%d",count);
18
        return 0;
19
    }
20
```

	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 ►