

Programming II –Exercises

Greedy

GD1: Carrying items (1 sec)

A teacher with his students will go picnicking to a mountain pack. There are N objects to be carried by the M students. Each item has a weight and must be carried by one student since it cannot be partitioned into pieces. Also for the sake of safety, a student can carry at most one item. For each student, there is a power-value which is the maximum weight he/she can carry. A student should be paid for reward if he/she carry an item, and the reward is a number of his/her power-value.

Write a program to compute the minimum reward the teacher must pay.

輸入說明:

The input consists of a number of test cases. The first line is an integer T which is the number of test cases, and the test cases follow one by one. The input of a test case consists of three lines. The first line contains two integers N and M , which are the numbers of items and students, respectively. The second line consists of N integers, which are the weights of the N items. The third line consists of M integers which are the power-values of the students. Any two consecutive numbers in the same line are separated by a space. All the input and output numbers in this problem are 32-bit integers. You can assume that $0 < N \leq M < 10000$.

輸出說明:

For each test case, output the minimum reward the teacher needs to pay in an individual line. If there is no way to carry all the items, then output -1.

範例:

| Sample Input: | Sample Output: |
|---------------|----------------|
| 2 | 17 |
| 5 7 | -1 |
| 2 3 1 5 4 | |

| | |
|--------------------------------------|--|
| 1 2 1 3 9 7 4 3 2 1 2 3 1 1 | |
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