Party

R-Boy wants to organize a party with his friends. Help him choose which ones to invite and which to exclude in order to make the party as beautiful as possible.

Details

R-Boy has **N** friends, each of whom has a **A[i]** friendship rating that indicates how much R-Boy appreciates his presence. Obviously there are also some unpleasant ones in the list, which therefore has a negative degree of friendship.

The beauty of the party is defined as the sum of the degree of friendship of the guests. How much can this sum be worth at most?

Assumptions

- **T < 1.000**, the number of test cases.
- **1 <= N <= 10.000**, the number of friends of R-Boy.
- **-10.000 <= A[i] <= 10.000**, the degree of friendship of the *i*-th friend.
- It is also possible that R-Boy party without friends, in which case the party is worth *0*.

Input data

The first line of the input file contains an integer **T**, the number of test cases. Followed by **T** test cases, numbered from **1** to **T**.

In each test case, the first line contains the only integer **N**. The second line contains the **N** integers separated by spaces, **A[i]**.

Output data

The output file must contain the answer to the test cases you could solve. For each test case you've solved, the output file must contain a line with the words:

```
Case #t: k
```

where t is the test case number (starting from **1**) and k is the maximum beauty value obtainable.

Example of input/output

Input:

```
2

8
1 -4 5 -2 -1 8 0 1

3
-1 -2 -4
```

Output:

```
Case #1: 15
Case #2: 0
```

Explanation

In the **first example case** the solution is obtained by inviting the first, the third, the sixth, the seventh and the eighth friend, totalizing a sum of **15**.

In the **second example case** the solution is obtained by not inviting any friends, thus totaling **0**.