# Can You Believe It?

**Program Name:** Believe.java **Input File:** believe.dat

Each Mal-Wart supermarket has prepared a promotion scheme run by the following rules:

- A client who wants to participate in the promotion (aka a sucker) must write down their phone number on the bill of their purchase and put the bill into a special urn.
- Two bills are selected from the urn at the end of each day: first the highest bill is selected and then the lowest bill is selected. The client who paid the largest bill receives a monetary prize equal to the difference between his bill and the lowest bill of the day.
- Both selected bills are not returned to the urn while all the remaining ones are kept in the urn for the next day.
- Mal-Wart has many clients such that at the end of each day there are at least two bills in the urn.
- It is quite obvious why Mal-Wart is doing this: they sell poorly-made products which break quickly and irreparably. They give a short-term warranty on their products but in order to obtain a warranty replacement you need the bill of sale. So if you are gullible enough to participate in the promotion you will regret it.

Your task is to write a program which takes information about the bills put into the urn and computes Mal-Wart's cost of the promotion.

## Input

The input contains a number of cases. The first line in each case contains an integer $n$, $1 \le n \le 5000$, the number of days of the promotion. Each of the subsequent $n$ lines contains a sequence of non-negative integers separated by whitespace. The numbers in the $(i + 1)$-st line of a case give the data for the $i$-th day. The first number in each of these lines, $k$, $0 \le k \le 10^5$ , is the number of bills and the subsequent $k$ numbers are positive integers of the bill amounts. No bill is bigger than $10^6$. The total number of all bills is no bigger than $10^6$. The case when $n = 0$ terminates the input and should not be processed.

## Output

For each case of input print one number: the total amount paid to the clients by Mal-Wart as the result of the promotion.

**Sample Input**

```
5
3 1 2 3
2 1 1
4 10 5 5 1
0
1 2
2
2 1 2
2 1 2
0
```

**Sample Output**

```
19
2
```