2151 - Stack of Stones

Description

Given **n** heaps of stones, now we want to combine them into a pile. To complete this work, first we can arbitrarily select two stacks and merge it into one, then arbitrarily take two of the remaining including that obtained by adding the first two, and so on. Combining two stacks spend some energy, and the cost is related to the number of stones in the smallest stack, for example if we combine two stacks with values 3 and 5 the cost is 3 and we obtain a stack of 8 stones. Now our work is given the amount of stacks, calculate the least amount of energy we need to do the job.

Input specification

The first line of the input contains an integer **1 <= t <= 10**, which represents the number of test cases. For each test case will appear a number **1 <= n <= 1000** the number of stacks, the next line contains the number of stones from each stack separated by one space (not greater than **100**).

Output specification

For each test case you should print a single number, the less energy you must spend to combine all stacks.

Sample input

```
1
4
3 5 6 9
```

Sample output

```
14
```

Hint(s)

Source	Nolberto Isaac González
Added by	**lgvallejo**
Addition date	2012-11-14
Time limit (ms)	10000

Test limit (ms)	1000
Memory limit (kb)	130000
Output limit (mb)	64
Size limit (bytes)	100000
Enabled languages	Bash C C# C++ Java Pascal Perl PHP Python Ruby Text