

Delivery problem

問題描述：

A deliveryman has to send N boxes to N different customers. Each box belongs to one customer. All the boxes are now in the warehouse. Each time he can carry one box to its owner, go back to the warehouse, and then deliver another box. The travelling time from the warehouse to the i -th customer is $t(i)$, and it takes the same time to go back. Also we assume that there is no other time to be considered. The deliveryman wants to determine the delivery sequence such that the total waiting time of all the customers is minimized, where the waiting time of a customer is the time from now to the time he receives his box.

For example, if there are three boxes and the travelling times are $t(0)=20$, $t(1)=10$, $t(2)=30$. The best sequence of the box indexes is (1,0,2). The waiting times 10, 40, and 90, respectively, which gives a total waiting time 140. Write a program to compute the minimum total waiting time.

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 two lines. The first line contains an integer N , $0 < N \leq 1000$, which is the numbers of boxes to be delivered. The second line consists of N integers, which are $t(0)$, $t(1)$, ..., $t(N-1)$. Two consecutive numbers are separated by one space. All the input and output numbers in this problem are 32-bit integers.

輸出說明:

Output the total waiting time in one line.

範例:

Sample Input:	Sample Output:
1 3 20 10 30	140

