

Annie's 18th Birthday

Today is Annie's 18th birthday. So Uncle John has given her N boxes of chocolate as a gift. But there is a restriction; she can't take all the boxes of chocolate. She can take exactly M boxes of chocolate and rest of the boxes will be given her younger brother. i^{th} box contains x_i chocolates. Now UncleJohn shuffles all the boxes. Now Annie chooses M boxes blindly. What is the maximum and minimum number of chocolate that she can get?

Input:

Input starts with an integer T ($T \leq 100$) denoting the number of test cases. Each case starts with two space separated integers N and M ($1 \leq N \leq 1000$), ($1 \leq M \leq N$). Then next N line contains N integers, where i^{th} integer denotes the number of chocolate x_i ($1 \leq x_i \leq 1000$) in the i^{th} box.

Output:

For each case, print the case number, maximum and minimum number of chocolate that Annie can get.

Sample:

Input	Output
2	
5 2	
1 3 4 5 2	Case 1: 9 3
5 5	Case 2: 15 15
1 4 5 3 2	

Authored By: Tanvir Hasan Anick