

Submissions

Odd Man Out

7pt	Not attempted 209/214 users correct (98%)
7pt	Not attempted 206/209 users correct (99%)

Get to Work

9pt	Not attempted 127/149 users correct (85%)
9pt	Not attempted 124/127 users correct (98%)

Qualification Round

11pt	Not attempted 47/87 users correct (54%)
22pt	Not attempted 4/32 users correct (13%)

Polygraph

12pt	Not attempted 14/30 users correct (47%)
23pt	Not attempted 0/2 users correct (0%)

Top Scores

RalfKistner	77
mohamedafattah	65
Ahmed.Kamel	65
gwylim	65
Nooodles	55
amrSamir	55
Blazerfrost	55
naguib	55
Kosie	55
mRefaat88	55

Problem C. Qualification Round

This contest is open for practice. You can try every problem as many times as you like, though we won't keep track of which problems you solve. Read the [Quick-Start Guide](#) to get started.

Small input
11 points

Solve C-small

Large input
22 points

Solve C-large

Problem

You've just advanced from the Qualification Round of Google Code Jam Africa 2010, and you want to know how many of your fellow contestants advanced with you. To give yourself a challenge, you've decided only to look at how many people solved each problem.

The Qualification Round consisted of **P** problems; the i^{th} problem was fully solved by **S_i** contestants. Contestants had to solve **C** problems in order to advance to the next round. Your job is to figure out, using only that information, the maximum number of contestants who could have advanced.

Input

The first line of the input gives the number of test cases, **T**. **T** lines follow. Each will consist only of space-separated integers: first **P**, then **C**, then **P** integers **S₀...S_{P-1}**.

Output

For each test case, output one line containing "Case #x: y", where x is the case number (starting from 1) and y is the maximum number of contestants who could have advanced (in other words, the maximum number of contestants who could have solved at least **C** problems).

Limits

$$1 \leq T \leq 100$$

$$1 \leq C \leq P$$

Small dataset

$$1 \leq P \leq 6$$

$$0 \leq S_i \leq 1000$$

Large dataset

$$1 \leq P \leq 60$$

$$0 \leq S_i \leq 10^{17}$$

Sample

Input	Output
2	Case #1: 73
2 2 73 100	Case #2: 377
3 2 245 272 238	

