J. Camp Cup

time limit per test: 2 seconds
memory limit per test: 256 megabytes

This year and for the first time, ACM Assiut has a level 0 camp that gathered all the students from different universities who are interested in programming and want to improve their skills to be able to qualify to level 1.

Hussein, the Co-founder of the ACM Assiut community, decided to give a cup for the Trainee who got the first place in the camp standing. This cup will be given in the last day of the camp.

#	Level 0 Training Camp Our Heros	
	Name	Total Points
1	AhmedTom	3800
2	AhmedEzzatG	3439
3	Men7a	3087
4	karemo	2493
5	Rofidagamal	2178
6	yomna.abdelbaset	1856
7	Yasser___Gomma	1784
8	bilalahmed	1695
9	izanaty	1435
10	sara_ghazy	1370
11	Eng-Fathy	1173
12	xXKiritoXx	1069
13	rabea111	963
14	fatmaelrafee	908
15	refatmahmoud5	867

In our camp the standing is measured with a very easy way. Each day the trainees enter an onsite contest. The first trainee will get one thousand point, the second will get 90 percent of the first person, the third one will get 90 percent of the second trainee and so on. At the end, The points will be summed up and the winner will be rewarded.

Tomorrow is the last day in the camp and their will be a final contest that will determine the winner of the day. Omar, the chairman and the manger of that day, is very busy these days and has no time to calculate the trainees points.

He is asking you to help him in this problem. Omar will give you the trainees CF-handles rank ordered from the first to the last in each contest. You have to determine the Winner of camp and the final points of each one. For more clarification see the sample below.

Input

First line contain one numbers N ($1 \leq N \leq 10^3$) N donates number of camp days.

The N followed lines will contain a number M ($1 \leq M \leq 100$) Donates number of trainees in that day then M trainee's CF-handles who entered that i_{th} contest ($1 \leq |S| \leq 20$) including lowercase letters, numbers and symbols.

Output

In the first line print the cup winner. If there are multiple winners print the lexicographical smallest.

Then, in each line print each trainee name with points that he got in a descending order. if there are multiple trainees that have the same points print the lexicographical smallest first.

Examples

input Copy

```
5
4 ahmedtom ahmedezzat karemo men7a
3 yasser_gomma karemo ahmedezzat
4 ahmedezzat ahmedtom karemo men7a
2 karemo ahmedezzat
4 ahmedtom karemo men7a ahmedezzat
```

output Copy

```
karemo
karemo 4420
ahmedezzat 4339
ahmedtom 2900
men7a 2268
yasser_gomma 1000
```

input Copy

```
2
3 karemo ahmedezzat ahmedtom
3 karemo ahmedtom ahmedezzat
```

output Copy

```
karemo
karemo 2000
ahmedezzat 1710
ahmedtom 1710
```

Note

It's allowed for a trainee to enter only one contest and you will have to estimate his point.

It's guaranteed that there will be no spaces in the CF-handles.

When you calculate the points, you will have to round the number such the 5_{th} place will get 729*(90/100) = 656.1 $\approx$ 656 and the 7_{th} place will get 531*(90/100) = 477.9 $\approx$ 478.

ICPC Assiut University Training - Juniors Phase 1 Sheets-2022
Public
Participant

→ Group Contests
- Juniors Phase 1 Practice #5 (Bitmask, Bitset, Bits)
- Juniors Phase 1 Practice #4 (Binary search , Two pointers)
- Juniors Phase 1 Practice #3 (STL 2)
- Juniors Phase 1 Practice #2 (STL 1)
- Juniors Phase 1 Practice #1 (Prefix sum , Frequency Array)

Juniors Phase 1 Practice #3 (STL 2)
Finished
Practice

→ About Time Scaling

This contest uses time limits scaling policy (depending on a programming language). The system automatically adjusts time limits by the following multipliers for some languages. Despite scaling (adjustment), the time limit cannot be more than 30 seconds. Read the details by the link.

→ Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest

→ Submit?

Language: GNU G++20 13.2 (64 bit, win

Choose file: Choose File No file chosen

Submit

→ Last submissions

Submission	Time	Verdict
311945005	Mar/23/2025 05:01	Accepted
311944015	Mar/23/2025 04:40	Wrong answer on test 4
311943905	Mar/23/2025 04:38	Wrong answer on test 4
311943264	Mar/23/2025 04:24	Wrong answer on test 4