

TASK1

Given N and K and a list of numbers find the Kth minimum number and Kth maximum number.

INPUT

First line contains the number of testcases N, followed by N cases as specified below

Two integers N and K.

Next line contains N space separated integers

OUTPUT

write to a file the kth Smallest and and kth Largest numbers on a single line

and push to [github](#)

SAMPLE INPUT

3

3 2

1 2 3

5 2

3 7 5 9 2

SAMPLE RESULT

2 2

2 7

TASK2

The Nigeria Football match is about to start and the list of

available players is being shown on the screen, Your friend has just ask

you to find which name in the player list as all its letters in the remaining players names in any order.

As an ACM member you have decide no not bother about it but simply to write a program to solve it!

INPUT

The input consist of a single line containing the number of testcase T.

T testcases follows with a single line of N space seperated words.

OUTPUT

for each case write to a file the word whose all letters are in all others words.

if no word matches the above description write "NO MATCHES",qoutes for clarity.

NB:

The given words might not be valid names

SAMPLE OUTPUT

3

abdul james ab

james cosmic joe

jane john emmanuel

SAMPLE INPUT

ab

joe

NO MATCHES

TASK3

Given a list of words find which letter has the most frequency.

INPUT

A single integer T denoting the number of testcases.

T Testcase followed, each a single line containing a single

OUTPUT

Write to a file the most frequent letter in each word.

NB:

In the case of tie write any to the file

SAMPLE INPUT

4

backspace

google

federal

magic

SAMPLE OUTPUT

a

o

e

i

TASK4

Find the number of ways to permute a given word.

INPUT

A single integer T denoting the number of testcases.

T Testcase followed, each a single line containing a single word

OUTPUT

Write to a file the number of ways to permute the given word.

SAMPLE INPUT

4

backspace

google

federal

magic

SAMPLE OUTPUT

362880

720

5040

120