Tournament P26606_en

Consider an all-play-all tournament, in which each team (or player) will meet every other participant exactly once, in turns. For instance, if we have $n = 2m$ football teams, we will have m concurrent matches in $n - 1$ different days. In the end, we aim for each team to have competed against all the other teams. Additionally, for fairness, we want every team to play m times at home and $m - 1$ times away, or $m - 1$ times at home and m times away. A similar situation would arise in a chess tournament, where we require all the players to have as many white pieces as black pieces (plus minus one).

Given the n names of the teams (or players), can you schedule all the matches?

Input

Input consists of several cases, each with n, followed by n different names made up of only lowercase letters. Assume $2 \leq n \leq 1000$, and that n is even.

Output

Print n lines for each case. The first $n - 1$ lines should have m matches separated by spaces. A match is a pair of names separated by a dash, where the first team plays at home and the second team plays away. End each case with a line with 10 asterisks. Since there is more than one solution, print any one. Follow strictly the format of the sample output.

Sample input 1

```
2 barca sampdoria
4 karpov kasparov fischer spassky
6 a b c d e f
```

Sample output 1

```
sampdoria-barca
**********
spassky-karpov kasparov-fischer
karpov-fischer spassky-kasparov
kasparov-karpov fischer-spassky
**********
e-c f-b d-a
b-a c-f d-e
c-d f-a b-e
f-d b-c a-e
e-f a-c d-b
**********
```

Problem information

Author: Salvador Roura

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