

Problem G

Pokémon Battle

There are various monsters (also called Pocket Monsters or Pokémon) in the Pokémon series. As of Generation VI, there are 18 types of Pokémon. In this problem, we focus only on 5 of them, i.e. FIRE-type, WATER-type, GRASS-type, GROUND-type, and FLYING-type. For example, Charmander is a FIRE-type Pokémon and Squirtle is a WATER-type Pokémon. The ever-popular Pikachu is an ELECTRIC-type, but we do not focus on this type of Pokémon in this problem.

When a Pokémon fights another Pokémon, their type modifies the effectiveness of their attacks. The following table shows the attack effectiveness chart of the 5 Pokémon types.

		Defending Type				
Attacking Type	vs.	FIRE	WATER	GRASS	GROUND	FLYING
	FIRE	$\frac{1}{2}\times$	$\frac{1}{2}\times$	$2\times$	$1\times$	$1\times$
	WATER	$2\times$	$\frac{1}{2}\times$	$\frac{1}{2}\times$	$2\times$	$1\times$
	GRASS	$\frac{1}{2}\times$	$2\times$	$\frac{1}{2}\times$	$2\times$	$\frac{1}{2}\times$
	GROUND	$2\times$	$1\times$	$\frac{1}{2}\times$	$1\times$	$0\times$
	FLYING	$1\times$	$1\times$	$2\times$	$1\times$	$1\times$

For example, if a FIRE-type Pokémon attacks a WATER-type Pokémon, then its attack effectiveness will be halved. However, if a FIRE-type Pokémon attacks a GRASS-type Pokémon, then its attack effectiveness is doubled.

You are given two Pokémon's types (one attacking and one defending), your task is to determine the effectiveness of the attack based on the table above. Your output should be one of these:

- $0\times \rightarrow$ not effective
- $\frac{1}{2}\times \rightarrow$ not very effective
- $1\times \rightarrow$ effective
- $2\times \rightarrow$ super effective

For example, if a FIRE-type Pokémon attacks a GRASS-type Pokémon, then the output is super effective as its effectiveness is $2\times$.



Input

Input begins with an integer T ($1 \leq T \leq 100$) representing the number of cases.

Each case contains two strings $A B$ ($A, B \in \{\text{FIRE, WATER, GRASS, GROUND, FLYING}\}$) representing the attacking Pokémon's type and the defending Pokémon's type, respectively.

Output

For each case, output in a line "Case #X: Y" (without quotes) where X is the case number (starts from 1) and Y is one of the following: not effective, not very effective, effective, super effective, depending on the attack effectiveness for that case.

Sample Input #1

```
3
FIRE WATER
FIRE GRASS
FLYING GROUND
```

Sample Output #1

```
Case #1: not very effective
Case #2: super effective
Case #3: effective
```

Explanation for the sample input/output #1

Consult the given table in the problem statement.