5. Hangman

Program Name: Hangman.java Input File: hangman.dat

You are going to write a hangman game that plays by the following rules:

- The contestant tries to determine the solution to a puzzle by guessing one letter at time.
- The contestant continues guessing letters until either all of the letters in the puzzle have been guessed, more than seven incorrect guesses have been made or the contestant quits.
- If the letter guessed, whether uppercase or lowercase, is found in the puzzle, each instance of that letter that appears as either an uppercase or a lowercase letter is considered to have been found.
- If the contestant guesses all of the letters before reaching 7 incorrect guesses, the contestant wins.
- If the letter guessed is not in the puzzle, the number of incorrect guesses left will be decreased by one.
- If the contestant has 7 incorrect guesses before guessing all of the letters, the contestant loses.
- If the contestant runs out of guesses before winning or losing, the contestant is considered to have quit.
- You may assume the contestant will not guess the same letter more than once.

Input

The first line will contain a single integer `n` that indicates the number of games that will follow. For each game, the first line will contain a word or phrase that is the puzzle to be solved. The second line of the game will contain the contestant's guesses. Only alphabetic characters and spaces will appear in a puzzle.

Output

For each game, output `WON` if the contestant won, `LOST` if the contestant lost, or `QUIT` if the contestant quit before winning or losing followed by the number of incorrect guesses the contestant had left.

Example Input File

```
3
Java is just fun
aeistfunjv
Lickety split
aeioubcdfg
UIL Academics
AIOUqwerty
```

Example Output to Screen

```
WON 6
LOST 0
QUIT 1
```