Problem I

Is It Secure Enough?

As part of the authentication system your company is working on you should write a password validator. The main intention of this is advise users about how strong is the password they captured in a text box. The rules used to calculate the password strength are the following:

- At least one lower case
- At least one upper case
- No consecutive numbers together (digits), and at least one number, regardless the order
- At least one special char among the set '.', '#', '$', '%', '/', '(', '&', ')'
- At least 10 characters long

Your validator should show the user the password strength based on the following classification:

- Strong: Complies with all rules
- Good: Complies with 4 rules
- Weak: Complies with 3 rules
- Rejected: Does not comply with at least 3 rules

Before putting the validator in production you need to run some tests on it. Given a list of passwords provide the password strength classification for each of them.

Input

The first line contains a single integer N ($1 \leq N \leq 10^5$)representing the number of passwords to test. Each of the following N lines contains a string s representing a password to test ($1 \leq |s| \leq 100$). It is guaranteed the password does not contain whitespaces and all characters will be lowercase letters, uppercase letters, all letters will be from the english alphabet, digits, or any of the characters '.', '#', '$', '%', '/', '(', '&', ')'.

Output

For each of the N passwords in the input print a line, representing the password strength classification (Strong, Good, Weak, or Rejected), with the Following format *Assertion number #<case number >: <classification >*

Input example 1	**Output example 1**
4 Password myColl#3Pa.s.word WeaK. Good.1	Assertion number #1: Rejected Assertion number #2: Strong Assertion number #3: Weak Assertion number #4: Good