Dickinson 2016: Secure Passwords

Many computer systems and web sites require that you create a secure password. What is a secure password is defined by each system with rules about how long the password must be and what type and how many of each type of characters must be included. In this problem you will check passwords to see if they are secure or not.

For this problem a secure password is defined as having the following properties:

- at least 8 characters
- at most 24 characters
- at least one lower case letter
- at least one upper case letter
- at least 1 digit (0...9) or at least one special character: !@#\$%^&*

Input Format

The first line of input contains a single integer, $N(1 \le N \le 100000)$, indicating how many passwords are to be checked.

The first line is followed by N lines containing one password each. Passwords will contain only upper and lowercase alphabet characters, the digits 0-9 and the special characters: $!@\#$\%^&*$

Output Format

The output will be a single line of text indicating if each password is secure or not as illustrated below.

Sample Input

2 NotaGoodPassWord Thi\$1isBetter

Sample Output

NotaGoodPassWord - not secure. Thi\$1isBetter - secure.