

Practice Mode

Contest scoreboard | Sign in

## Problem A. Read Phone Number

Round A China New Grad Test 2014

### A. Read Phone Number

- **B.** Rational Number Tree
- C. Sorting
- D. Cross the maze
- E. Spaceship Defence

This contest is open for practice. You can try every problem as many times as you like, though we won't keep track of which problems you solve. Read the <a href="Quick-Start Guide">Quick-Start Guide</a> to get started.

Small input 6 points

Large input 13 points

Solve A-small

Solve A-large

### **Questions** asked

# 

9pt	Not attempted	
	<b>1193/1545 users</b> correct (77%)	

12pt Not attempted 368/1037 users correct (35%)

### Sorting

5pt	<b>1666/1990 users</b> correct
8pt	(84%) Not attempted
·	<b>1551/1635 users</b> correct (95%)

#### Cross the maze

10pt	Not attempted <b>134/370 users</b> correct (36%)
13pt	Not attempted <b>119/132 users</b> correct

# (90%) Spaceship Defence

10pt | Not attempted

### Problem

Do you know how to read the phone numbers in English? Now let me tell you.

For example, In China, the phone numbers are 11 digits, like: 15012233444. Someone divides the numbers into 3-4-4 format, i.e. 150 1223 3444. While someone divides the numbers into 3-3-5 format, i.e. 150 122 33444. Different formats lead to different ways to read these numbers:

150 1223 3444 reads one five zero one double two three three triple four.

150 122 33444 reads one five zero one double two double three triple four.

Here comes the problem:

Given a list of phone numbers and the dividing formats, output the right ways to read these numbers.

### Rules:

Single numbers just read them separately.

- 2 successive numbers use double.
- 3 successive numbers use triple.
- 4 successive numbers use quadruple.
- 5 successive numbers use quintuple.
- 6 successive numbers use sextuple.
- 7 successive numbers use septuple.

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	<b>175/382 users</b> correct (46%)
14pt	Not attempted <b>106/152 users</b> correct (70%)

<ul> <li>Top Scores</li> </ul>	
dreamoon	100
springegg	100
tckwok	100
cgy4ever	100
Zuo	100
AlanC	100
Mochavic	100
Will.Wu	100
oldherl	100
gagguy	100

8 successive numbers use octuple.

9 successive numbers use nonuple.

10 successive numbers use decuple.

More than 10 successive numbers read them all separately.

### Input

The first line of the input gives the number of test cases, **T**. **T** lines|test cases follow. Each line contains a phone number **N** and the dividing format **F**, one or more positive integers separated by dashes (-), without leading zeros and whose sum always equals the number of digits in the phone number.

### Output

For each test case, output one line containing "Case #x: y", where x is the case number (starting from 1) and y is the reading sentence in English whose words are separated by a space.

Limits

 $1 \le T \le 100$ .

Small dataset

 $1 \le length of N \le 10$ .

Large dataset

 $1 \le \text{length of N} \le 100.$ 

Sample

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Input

3 15012233444 3-4-4 15012233444 3-3-5 12223 2-3

### Output

Case #1: one five zero one double two Case #2: one five zero one double two Case #3: one two double two three

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