

The Famous Clock

Mr. B, Mr. G and Mr. M are now in Warsaw, Poland, for the 2012's ACM-ICPC World Final Contest. They've decided to take a 5 hours training every day before the contest. Also, they plan to start training at 10:00 each day since the World Final Contest will do so. The scenery in Warsaw is so attractive that Mr. B would always like to take a walk outside for a while after breakfast. However, Mr. B have to go back before training starts, otherwise his teammates will be annoyed. But here is a problem: Mr. B does not have a watch. In order to know the exact time, he has bought a new watch in Warsaw, but all the numbers on that watch are presented with Roman numerals. Mr. B cannot understand such kind of numbers. Can you translate for him?

Input

Each test case contains a single line indicating a Roman number that to be translated. All the numbers can be found on clocks. That is, each numbers in the input represents an integer between 1 and 12. Roman numbers are expressed by strings consisting of uppercase **I**, **V** and **X**. See the sample input for further information.

Output

For each test case, display a single line containing a decimal number corresponding to the given Roman number.

Example

Input:

I
II
III
IV
V
VI
VII
VIII
IX
X
XI
XII

Output:

Case 1: 1
Case 2: 2
Case 3: 3
Case 4: 4
Case 5: 5
Case 6: 6
Case 7: 7
Case 8: 8
Case 9: 9
Case 10: 10
Case 11: 11
Case 12: 12