



TDDBUDDY.COM

# Numbers to Words

## Rules

1. Strictly practice TDD
  - a. Follow the: Test, Implement, Reflect, Refactor cycle.
  - b. Be sure to run your test after each reflect-refactor cycle.
2. Practice wishful coding
  - a. Do not write any production code until you have a failing test.
  - b. Or compilation failures to drive the need to implement the method.
3. Use your TDD Cube and Reference card if you have, be-sure to cycle the cube with each step

## The Kata

There are varying opinions amongst writers as to when one should spell out a number vs. using figures. There are few generally agreed upon rules for doing so.<sup>1</sup>

A few of them are :

- Numbers beginning a sentence should be spelt out.
- Hyphenate all compound numbers from twenty-one through ninety-nine

Write an implementation of these rules for numbers starting a sentence. It should take an input of figures and return the number spelt out. Assume all the numbers given start sentences and your code will be used like a spell checker for grammar issues related to numbers.

Only worry about up numbers up to 4 digits long. Assume all numbers are positive.

## Examples

### 1 digit

0 = zero

5 = five

### 2 digits

10 = ten

21 = twenty-one

77 = seventy-seven

### 3 digits

303 = three hundred three

555 = five hundred fifty-five

### 4 digits

2000 = two thousand

3466 = three thousand four hundred sixty-six

2400 = two thousand four hundred

## Bonus

Implement the additional rule : The simplest way to express large numbers is usually best. Instead of 5300 being equal to five thousand three hundred it should return fifty-three hundred.

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<sup>1</sup> <http://www.grammarbook.com/numbers/numbers.asp>