

Convert a number into words

Problem

Write a function that converts a given number into words. For example, given the number “1234” as input, return the output “one thousand, two hundred and thirty-four”.

The input to your application will consist of lines of text containing random digits. You are expected to handle invalid numbers appropriately.

Test cases

Test input	Expected output
The pump is 536 deep underground.	five hundred and thirty-six
We processed 9121 records.	nine thousand, one hundred and twenty-one
Variables reported as having a missing type #65678.	number invalid
Interactive and printable 10022 ZIP code.	ten thousand and twenty-two
The database has 66723107008 records.	sixty-six billion, seven hundred and twenty-three million, one hundred and seven thousand and eight
I received 23 456,9 KGs.	number invalid

Notes

- Typically we use the following programming languages R, Python and C, but are open to receiving the code in other programming languages
- The application should include a way to input data via a plain-text file
- The application must be able to run with the output directed to `STDOUT`
- The application should output correct values for inputs other than those specified under *Test input*
- You should provide sufficient evidence that your application is complete by including an example using the *Test input* data
- The submission should be pushed to a public or private version controlled repository (preferably `github`) and the relevant URL shared with us
- You may use all resources available to you, however you are strongly discouraged from using any 3rd party libraries specifically designed to solve this problem

Please include an explanation of your design choices and assumptions, along with your code and any instructions necessary to run the application

Evaluation criteria

- Rather than developing the most *technically correct* solution, we are interested in your **thought process** and approach to deriving a solution to such a problem.
- This problem should be seen as an opportunity to showcase your knowledge, and highlight those aspects of software engineering which you believe to be important.
- So while it is a small problem, we expect you to submit what you believe is a reasonably well polished application that you would be able to:
 - run
 - maintain
 - evolve