Instructions

Complete the following code challenges below and return each test in its own python file and zip the files or push the code to your github account and send us a link.

For each challenge:

* Specify the Python version used
* Use Python Standard Library only

Challenge 1

In this problem, you will be given one or more integers in English. Your task is to translate these numbers into their integer representation. The numbers can range from negative 999,999,999 to positive 999,999,999. The following is an exhaustive list of English words that your program must account for:

negative, zero, one, two, three, four, five, six, seven, eight, nine, ten, eleven, twelve, thirteen, fourteen, fifteen, sixteen, seventeen, eighteen, nineteen, twenty, thirty, forty, fifty, sixty, seventy, eighty, ninety, hundred, thousand, million

INPUT AND OUTPUT

Notes on input:

* Negative numbers will be preceded by the word negative.
* The word “hundred” is not used when “thousand” could be. For example, 1500 is written “one thousand five hundred”, not “fifteen hundred”.

SAMPLE INPUT

six, negative seven hundred twenty nine, one million one hundred one

SAMPLE OUTPUT

6, -729, 1000101

Challenge 2

In the block of text below, find the longest substring that is the same in reverse (palindrome). As an example, if the input was "Ilikeracecarsthatgofast" the answer would be "racecar".

Fourscoreandsevenyearsagoourfaathersbroughtforthonthiscontainentanewnationconceiv

edinzLibertyanddedicatedtothepropositionthatallmenarecreatedequalNowweareengagedi

nagreahtcivilwartestingwhetherthatnaptionoranynartionsoconceivedandsodedicatedcanlo

ngendureWeareqmetonagreatbattlefiemldoftzhatwarWehavecometodedicpateaportionoft

hatfieldasafinalrestingplaceforthosewhoheregavetheirlivesthatthatnationmightliveItisalto

getherfangandproperthatweshoulddothisButinalargersensewecannotdedicatewecannotco

nsecratewecannothallowthisgroundThebravelmenlivinganddeadwhostruggledherehaveco

nsecrateditfaraboveourpoorponwertoaddordetractTgheworldadswfilllittlenotlenorlongre

memberwhatwesayherebutitcanneverforgetwhattheydidhereItisforusthelivingrathertobed

edicatedheretotheulnfinishedworkwhichtheywhofoughtherehavethusfarsonoblyadvancedI

tisratherforustobeherededicatedtothegreattdafskremainingbeforeusthatfromthesehonore

ddeadwetakeincreaseddevotiontothatcauseforwhichtheygavethelastpfullmeasureofdevoti

onthatweherehighlyresolvethatthesedeadshallnothavediedinvainthatthisnationunsderGod

shallhaveanewbirthoffreedomandthatgovernmentofthepeoplebythepeopleforthepeoplesh

allnotperishfromtheearth

Challenge 3

Given the dictionary of words:

albums

barely

befoul

convex

hereby

jigsaw

tailor

weaver

And this collection of word “pieces”:

al

bums

bar

ely

be

foul

con

vex

here

by

jig

saw

tail

or

we

aver

Find all six letter words from the dictionary using the collection of pieces. In other words, iterate through the pieces to find the wholes:

al + bums => albums

bar + ely => barely

be + foul => befoul

etc …

Print the attempts used to find the whole:

albar != albums

alely != albums

albe != albums

etc …