

The problem

Given an input a file with a string of text in each line, develop a python program to output the “type” of each string<20.; the number of lines <50. The possible types are as follows.

- **Integer** : a + or – at the front (+ is optional) followed by a string of digits. Examples: 354, 0, -120, -2
- **Float**: a + or – at the front (+ is optional), an integer part a dot separating the integer part and the fractional part, then the fractional part. Examples: 0.00, -193.24, 5.370
- **Date**: in the format of “dd-mm-yyyy” where dd=date(any 2 digit 0<dd<32), mm=month (any 2 digit 0<13<year), yyyy=year (any 4 digits 1991<yyyy<2999)
- **Text**: any other string (none of the above)

You should also satisfy the following requirements:

- a. Create a text file named “FileIn.txt” containing the input, in the folder.
- b. Have a python function named “getText” to read the input from the file “FileIn.txt”. invalid inputs should be appropriately handled.
- c. Have a python function named “show” to display the output on the screen and to write it to a file named “result.txt” in the same folder. You may define additional functions in your code.
- d. The main program should call the functions appropriately to achieve the task.

Sample input

+123

0

123.456

72-39-0001

31-12-2015

Hello, World!

Output (on screen and output file)

int

int

float

text

date

text