Python In-class Programming Assignment
Analyzing Files Containing Floats

Write a python program that prompts the user for a file containing several floating-point numbers, each separated by a semicolon (';'). Using list operations, compute the following information for the selected file:

`Count:` *The number of floats in the file*
`Min:` *The smallest float in the file*
`Max:` *The largest float in the file*
`Average:` *The average of all the floats in the file*

Requirements:

- You must use formatted output, with thousands separators and decimals rounded to five places.
- If an invalid file name is entered (not found) you must prompt the user again until a valid file name is entered.
- Here's an example of the required program output:

```
Count:          50,000
Min:        -999.27042
Max:      59,998.05731
Average:  29,462.64161
```

Hints:

- Use the `getFile()` function you already wrote.
- Remember that data you read from text files in python is always a string.
- You may assume that any test file you run will be properly formatted, with proper semicolon separators.
- Files are not arranged with multiple lines (each ending in '`\n`'); they contain one continuous string of characters.
- In `~/repo201/classwork/cw28`, there are five test files (`floats1.txt -> floats5.txt`) that you can use to test your code. I recommend opening `floats1.txt` in atom and looking at it to get a sense for the file structure. That directory also contains an executable program called `analyzeFloats` that you can run on the included files to make sure your program is providing the correct answers. To use the `analyzeFloats` executable follow these instructions:

  1. First, make sure your repo is up-to-date.

  2. Next, let's assume you're working in your `~/shares/sy201` directory. You can run `analyzeFloats` by first copying it to your working directory and then adjusting its permissions with the following commands:

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a.
```
cp ~/repo201/classwork/cw28/analyzeFloats .
```
(*the trailing space and period in the command above are important*)

b.
```
chmod 755 analyzeFloats
```

You only have to perform steps (a) and (b) once. After that, you can run the program any time you want by typing: `./analyzeFloats`