

Take-home test for Unit 2



Task

In this test, we will write a program that reads a text file, prints it out line by line, and reports a summary about each line.

Step-by-step implementation

1. Create a program file called `test2.py`.
2. Download the text file `win95coolest.txt` from the URL <http://web.textfiles.com/humor/win95coolest.txt> and save it in the same folder with `test2.py`.
3. In `test2.py`, write a program that reads `win95coolest.txt` and prints it out line by line.
4. Modify the program so that it prints out each line **prefixed by its line number**. The first few lines of the output should look like:

```
1 Windows95 Will Have the Coolest Users Ever
2
3 REDMOND, WASHINGTON -- In order to calm growing impatience among PC users
4 concerning the repeated delays of its new Windows 95 operating system,
5 Microsoft Corporation announced what it calls the "Cool User Program for
6 Windows 95." To participate in this offer, a user pays US$10,000 at which
```

5. Modify the program to additionally print **the number of words** in each line. The first lines of the output should look as follows (highlighting is added to emphasize the change):

```

1 7 Windows95 Will Have the Coolest Users Ever
2 0
3 12 REDMOND, WASHINGTON -- In order to calm growing impatience among PC users
4 11 concerning the repeated delays of its new Windows 95 operating system,
5 11 Microsoft Corporation announced what it calls the "Cool User Program for
6 13 Windows 95." To participate in this offer, a user pays US$10,000 at which

```

6. Modify the program so that it also prints **the average length of the words** in each line. You have to be careful when dealing with lines that contain 0 words: assume that the average word length is zero in this case. The first lines of the output should look as follows (highlighting is added to emphasize the change):

```

1 7 5.142857142857143 Windows95 Will Have the Coolest Users Ever
2 0 0
3 12 5.166666666666667 REDMOND, WASHINGTON -- In order to calm growing impatience among PC users
4 11 5.454545454545454 concerning the repeated delays of its new Windows 95 operating system,
5 11 5.636363636363637 Microsoft Corporation announced what it calls the "Cool User Program for
6 13 4.6923076923076925 Windows 95." To participate in this offer, a user pays US$10,000 at which

```



7. Submit your complete program `test2.py` through Blackboard.