

IT314 Lab5

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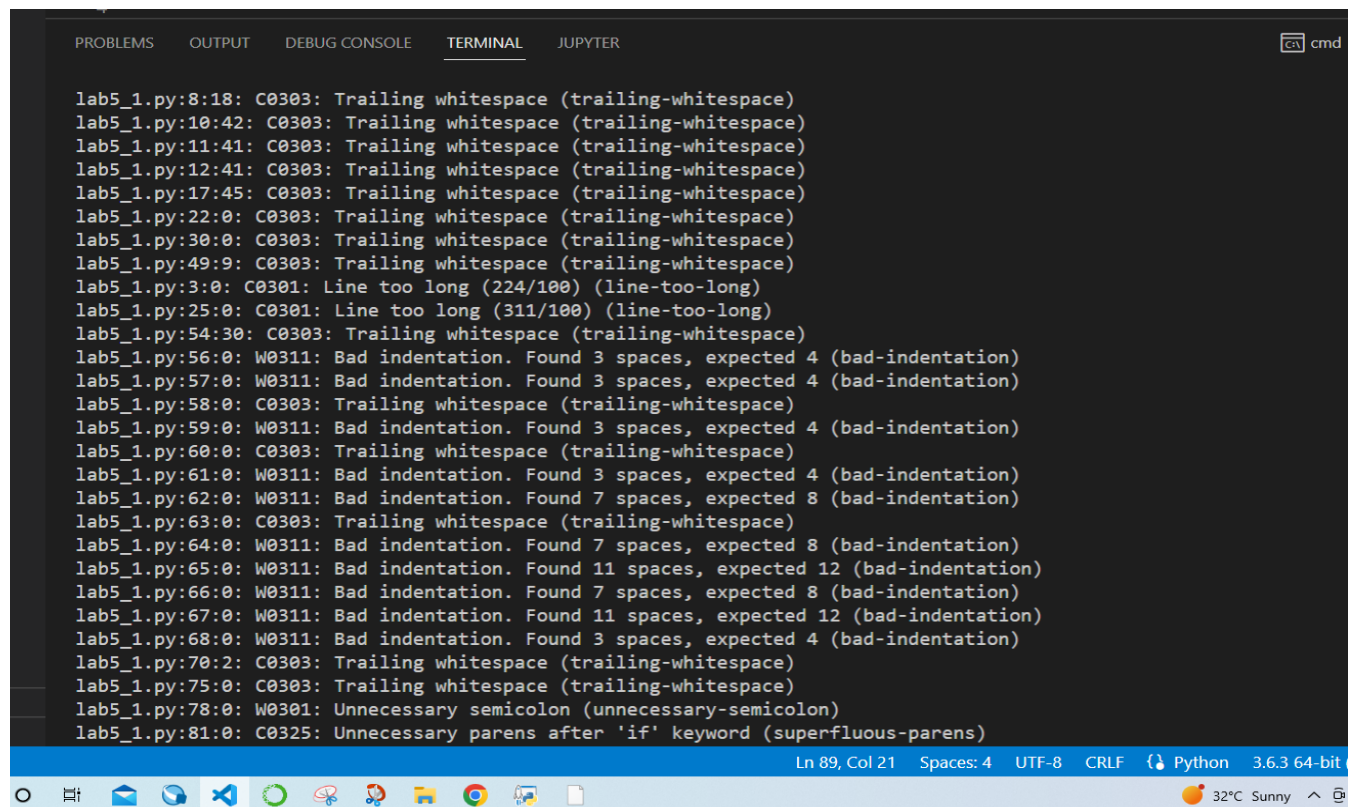
ID: 202001460

Group 26

Static Analysis Tool: Pylint

Example 1:

https://github.com/ivsumitkumar/Python/blob/073556fa57fc675bb631f387ed8adc3c502f2841/GFG-POTD/0068_Smallest_greater_elements_in_whole_array.py



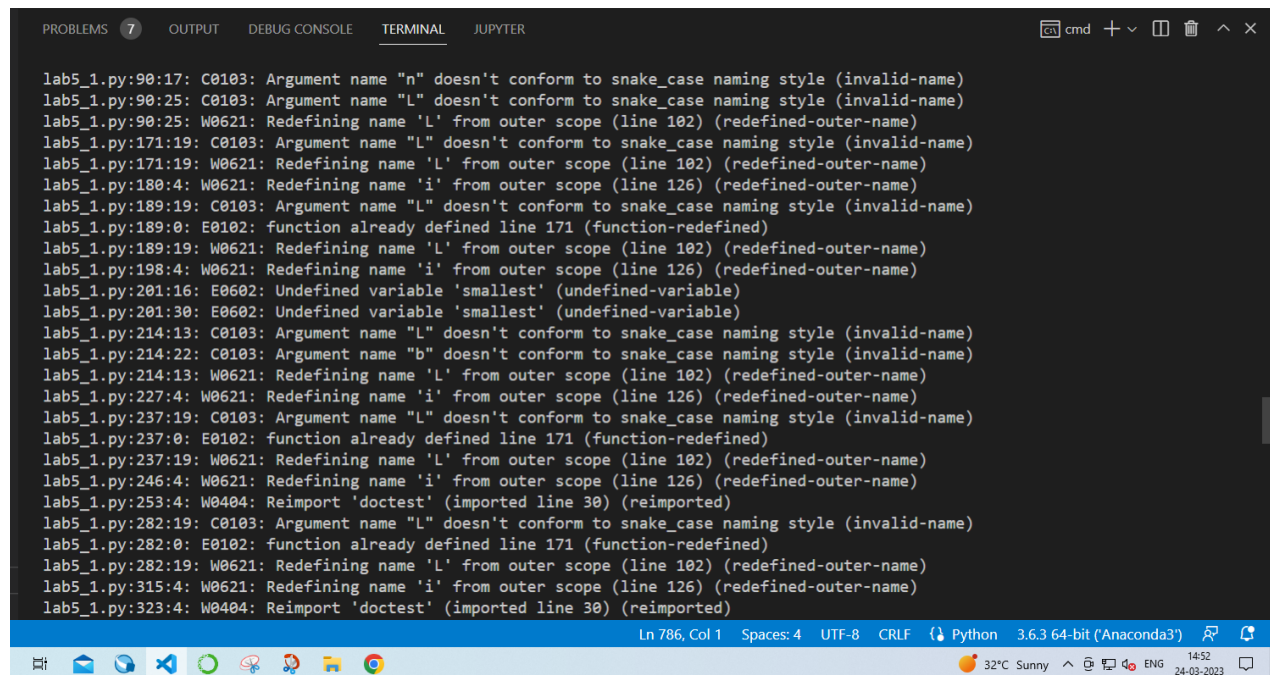
```
lab5_1.py:8:18: C0303: Trailing whitespace (trailing-whitespace)
lab5_1.py:10:42: C0303: Trailing whitespace (trailing-whitespace)
lab5_1.py:11:41: C0303: Trailing whitespace (trailing-whitespace)
lab5_1.py:12:41: C0303: Trailing whitespace (trailing-whitespace)
lab5_1.py:17:45: C0303: Trailing whitespace (trailing-whitespace)
lab5_1.py:22:0: C0303: Trailing whitespace (trailing-whitespace)
lab5_1.py:30:0: C0303: Trailing whitespace (trailing-whitespace)
lab5_1.py:49:9: C0303: Trailing whitespace (trailing-whitespace)
lab5_1.py:3:0: C0301: Line too long (224/100) (line-too-long)
lab5_1.py:25:0: C0301: Line too long (311/100) (line-too-long)
lab5_1.py:54:30: C0303: Trailing whitespace (trailing-whitespace)
lab5_1.py:56:0: W0311: Bad indentation. Found 3 spaces, expected 4 (bad-indentation)
lab5_1.py:57:0: W0311: Bad indentation. Found 3 spaces, expected 4 (bad-indentation)
lab5_1.py:58:0: C0303: Trailing whitespace (trailing-whitespace)
lab5_1.py:59:0: W0311: Bad indentation. Found 3 spaces, expected 4 (bad-indentation)
lab5_1.py:60:0: C0303: Trailing whitespace (trailing-whitespace)
lab5_1.py:61:0: W0311: Bad indentation. Found 3 spaces, expected 4 (bad-indentation)
lab5_1.py:62:0: W0311: Bad indentation. Found 7 spaces, expected 8 (bad-indentation)
lab5_1.py:63:0: C0303: Trailing whitespace (trailing-whitespace)
lab5_1.py:64:0: W0311: Bad indentation. Found 7 spaces, expected 8 (bad-indentation)
lab5_1.py:65:0: W0311: Bad indentation. Found 11 spaces, expected 12 (bad-indentation)
lab5_1.py:66:0: W0311: Bad indentation. Found 7 spaces, expected 8 (bad-indentation)
lab5_1.py:67:0: W0311: Bad indentation. Found 11 spaces, expected 12 (bad-indentation)
lab5_1.py:68:0: W0311: Bad indentation. Found 3 spaces, expected 4 (bad-indentation)
lab5_1.py:70:2: C0303: Trailing whitespace (trailing-whitespace)
lab5_1.py:75:0: C0303: Trailing whitespace (trailing-whitespace)
lab5_1.py:78:0: W0301: Unnecessary semicolon (unnecessary-semicolon)
lab5_1.py:81:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
```

Explanation: here in code there are multiple trailing white spaces that refer to any space characters that appear at the end of a line after the last

non-space character. Although it may not cause any issues with the code's functionality, it's considered a bad practice and can create unnecessary noise in the code.

Example2:

https://github.com/LeeMorinUCF/QMB3311S22/blob/c858fb9d03022e6b4f9a873f508ed41eb4ef2bf8/demo_18_PP_Ch_13_Sorting/PP_Ch_13B.py



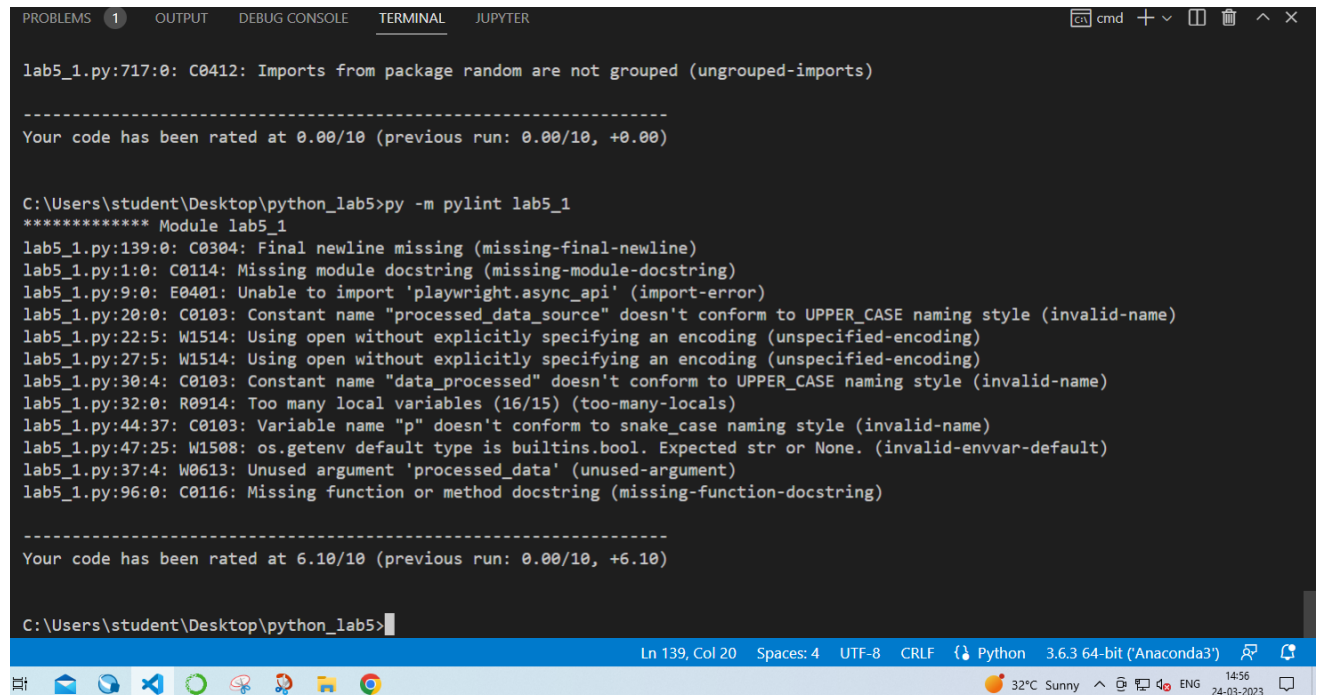
The screenshot shows a Jupyter Notebook interface with a terminal window open. The terminal displays a series of Python error messages from a file named lab5_1.py. The errors include:

- Argument name "n" doesn't conform to snake_case naming style (invalid-name)
- Argument name "L" doesn't conform to snake_case naming style (invalid-name)
- Redefining name 'L' from outer scope (line 102) (redefined-outer-name)
- Argument name "L" doesn't conform to snake_case naming style (invalid-name)
- Redefining name 'L' from outer scope (line 102) (redefined-outer-name)
- Redefining name 'i' from outer scope (line 126) (redefined-outer-name)
- Argument name "L" doesn't conform to snake_case naming style (invalid-name)
- function already defined line 171 (function-redefined)
- Redefining name 'L' from outer scope (line 102) (redefined-outer-name)
- Redefining name 'i' from outer scope (line 126) (redefined-outer-name)
- Undefined variable 'smallest' (undefined-variable)
- Undefined variable 'smallest' (undefined-variable)
- Argument name "L" doesn't conform to snake_case naming style (invalid-name)
- Argument name "b" doesn't conform to snake_case naming style (invalid-name)
- Redefining name 'L' from outer scope (line 102) (redefined-outer-name)
- Redefining name 'i' from outer scope (line 126) (redefined-outer-name)
- Argument name "L" doesn't conform to snake_case naming style (invalid-name)
- function already defined line 171 (function-redefined)
- Redefining name 'L' from outer scope (line 102) (redefined-outer-name)
- Redefining name 'i' from outer scope (line 126) (redefined-outer-name)
- Reimport 'doctest' (imported line 30) (reimported)
- Argument name "L" doesn't conform to snake_case naming style (invalid-name)
- function already defined line 171 (function-redefined)
- Redefining name 'L' from outer scope (line 102) (redefined-outer-name)
- Redefining name 'i' from outer scope (line 126) (redefined-outer-name)
- Reimport 'doctest' (imported line 30) (reimported)

The terminal window also shows the current line and column (Ln 786, Col 1), the number of spaces (4), the encoding (UTF-8), the line ending (CRLF), the interpreter (Python 3.6.3 64-bit (Anaconda3)), and the system status (32°C Sunny, 14:52, 24-03-2023).

Explanation: here in code there are multiple snake naming style errors. In the "snake_case" convention, names are written in all lowercase letters, with words separated by underscores. For example, the name "my_variable_name" is written in "snake_case".

Example3:https://github.com/Marketionist/py-web-scraper/blob/f7f1881a897650a155078d39903e7ea26ba45f22/web_scraper.py



```
lab5_1.py:717:0: C0412: Imports from package random are not grouped (ungrouped-imports)

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Your code has been rated at 0.00/10 (previous run: 0.00/10, +0.00)

C:\Users\student\Desktop\python_lab5>py -m pylint lab5_1
***** Module lab5_1
lab5_1.py:139:0: C0304: Final newline missing (missing-final-newline)
lab5_1.py:1:0: C0114: Missing module docstring (missing-module-docstring)
lab5_1.py:9:0: E0401: Unable to import 'playwright.async_api' (import-error)
lab5_1.py:20:0: C0103: Constant name "processed_data_source" doesn't conform to UPPER_CASE naming style (invalid-name)
lab5_1.py:22:5: W1514: Using open without explicitly specifying an encoding (unspecified-encoding)
lab5_1.py:27:5: W1514: Using open without explicitly specifying an encoding (unspecified-encoding)
lab5_1.py:30:4: C0103: Constant name "data_processed" doesn't conform to UPPER_CASE naming style (invalid-name)
lab5_1.py:32:0: R0914: Too many local variables (16/15) (too-many-locals)
lab5_1.py:44:37: C0103: Variable name "p" doesn't conform to snake_case naming style (invalid-name)
lab5_1.py:47:25: W1508: os.getenv default type is builtins.bool. Expected str or None. (invalid-envvar-default)
lab5_1.py:37:4: W0613: Unused argument 'processed_data' (unused-argument)
lab5_1.py:96:0: C0116: Missing function or method docstring (missing-function-docstring)

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Your code has been rated at 6.10/10 (previous run: 0.00/10, +6.10)

C:\Users\student\Desktop\python_lab5>
```

Explanation: The error message "Final newline missing" or "missing-final-newline" indicates that the file mentioned in the error (in this case "lab5_1.py") does not end with a newline character at the end of the file. This can be resolved by simply adding a newline character at the end of the file.

Example4:

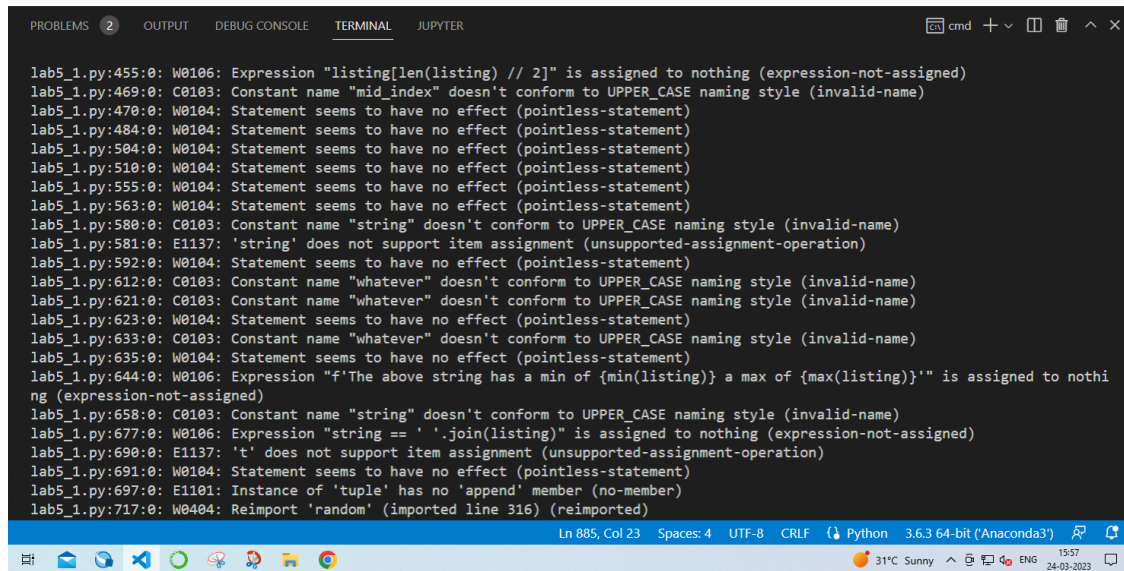
https://github.com/EricSchles/cuny_intro_to_ds_book/blob/6cc920c9c727081e1ee84809814f5ef30201f5c5/_build/jupyter_execute/02/1/list-strings-tuples.py

```
lab5_1.py:555:0: W0104: Statement seems to have no effect (pointless-statement)
lab5_1.py:563:0: W0104: Statement seems to have no effect (pointless-statement)
lab5_1.py:580:0: C0103: Constant name "string" doesn't conform to UPPER_CASE naming style (invalid-name)
lab5_1.py:581:0: E1137: 'string' does not support item assignment (unsupported-assignment-operation)
lab5_1.py:592:0: W0104: Statement seems to have no effect (pointless-statement)
lab5_1.py:612:0: C0103: Constant name "whatever" doesn't conform to UPPER_CASE naming style (invalid-name)
lab5_1.py:621:0: C0103: Constant name "whatever" doesn't conform to UPPER_CASE naming style (invalid-name)
lab5_1.py:623:0: W0104: Statement seems to have no effect (pointless-statement)
lab5_1.py:633:0: C0103: Constant name "whatever" doesn't conform to UPPER_CASE naming style (invalid-name)
lab5_1.py:635:0: W0104: Statement seems to have no effect (pointless-statement)
lab5_1.py:644:0: W0106: Expression "f'The above string has a min of {min(listing)} a max of {max(listing)}'" is assigned to nothing (expression-not-assigned)
lab5_1.py:658:0: C0103: Constant name "string" doesn't conform to UPPER_CASE naming style (invalid-name)
lab5_1.py:677:0: W0106: Expression "string == ' '.join(listing)" is assigned to nothing (expression-not-assigned)
lab5_1.py:690:0: E1137: 't' does not support item assignment (unsupported-assignment-operation)
lab5_1.py:691:0: W0104: Statement seems to have no effect (pointless-statement)
lab5_1.py:697:0: E1101: Instance of 'tuple' has no 'append' member (no-member)
lab5_1.py:717:0: W0404: Reimport 'random' (imported line 316) (reimported)
lab5_1.py:717:0: C0413: Import "import random" should be placed at the top of the module (wrong-import-position)
lab5_1.py:772:0: W0404: Reimport 'random' (imported line 316) (reimported)
lab5_1.py:772:0: C0413: Import "import random" should be placed at the top of the module (wrong-import-position)
lab5_1.py:774:0: W0106: Expression "(random.randint(0, 10), random.randint(0, 10), random.randint(0, 10))" is assigned to nothing (expression-not-assigned)
lab5_1.py:793:0: W0104: Statement seems to have no effect (pointless-statement)
```

Explanation: There are multiple pointless statements in this code. A piece of code that performs nothing useful or significant is typically referred to as a "pointless statement," such as assigning a value to a variable that is never used or invoking a function that has no side effects and whose return value is never used. Also there are some errors of constants names which are does not confirm to upper case naming style.

Example 5:

https://github.com/EricSchles/cuny_intro_to_ds_book/blob/6cc920c9c727081e1ee84809814f5ef30201f5c5/_build/jupyter_execute/02/1/list-strings-tuples.py



```
lab5_1.py:455:0: W0106: Expression "listing[len(listing) // 2]" is assigned to nothing (expression-not-assigned)
lab5_1.py:469:0: C0103: Constant name "mid_index" doesn't conform to UPPER_CASE naming style (invalid-name)
lab5_1.py:470:0: W0104: Statement seems to have no effect (pointless-statement)
lab5_1.py:484:0: W0104: Statement seems to have no effect (pointless-statement)
lab5_1.py:504:0: W0104: Statement seems to have no effect (pointless-statement)
lab5_1.py:510:0: W0104: Statement seems to have no effect (pointless-statement)
lab5_1.py:555:0: W0104: Statement seems to have no effect (pointless-statement)
lab5_1.py:563:0: W0104: Statement seems to have no effect (pointless-statement)
lab5_1.py:580:0: C0103: Constant name "string" doesn't conform to UPPER_CASE naming style (invalid-name)
lab5_1.py:581:0: E1137: 'string' does not support item assignment (unsupported-assignment-operation)
lab5_1.py:592:0: W0104: Statement seems to have no effect (pointless-statement)
lab5_1.py:612:0: C0103: Constant name "whatever" doesn't conform to UPPER_CASE naming style (invalid-name)
lab5_1.py:621:0: C0103: Constant name "whatever" doesn't conform to UPPER_CASE naming style (invalid-name)
lab5_1.py:623:0: W0104: Statement seems to have no effect (pointless-statement)
lab5_1.py:633:0: C0103: Constant name "whatever" doesn't conform to UPPER_CASE naming style (invalid-name)
lab5_1.py:635:0: W0104: Statement seems to have no effect (pointless-statement)
lab5_1.py:644:0: W0106: Expression "f'The above string has a min of {min(listing)} a max of {max(listing)}'" is assigned to nothing (expression-not-assigned)
lab5_1.py:658:0: C0103: Constant name "string" doesn't conform to UPPER_CASE naming style (invalid-name)
lab5_1.py:677:0: W0106: Expression "string == ' '.join(listing)" is assigned to nothing (expression-not-assigned)
lab5_1.py:690:0: E1137: 't' does not support item assignment (unsupported-assignment-operation)
lab5_1.py:691:0: W0104: Statement seems to have no effect (pointless-statement)
lab5_1.py:697:0: E1101: Instance of 'tuple' has no 'append' member (no-member)
lab5_1.py:717:0: W0404: Reimport 'random' (imported line 316) (reimported)
```

Explanation: There are multiple pointless statements in this code. The explanation of that I have given in the above example. And also there are uppercase naming style errors and also there are random imports in this code. According to Python style rules, all import statements should be put at the beginning of your script.