## Software Engineering

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Lab: 05

Github tool and selected repository

Here, i am using pylint tool for python

https://github.com/rishabh1005/Algorithmic-Toolbox

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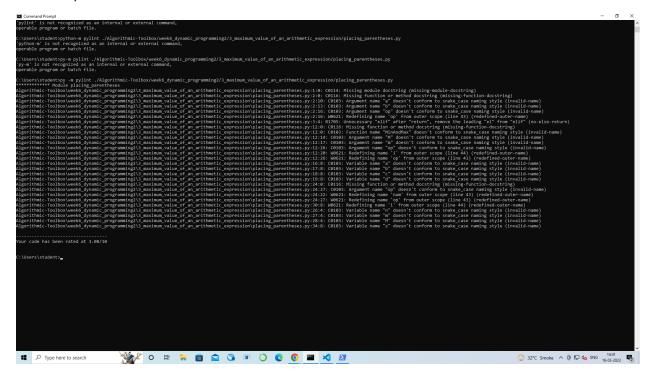
Cloing and installing require tools

Performing static Analysis and error understanding

(1)

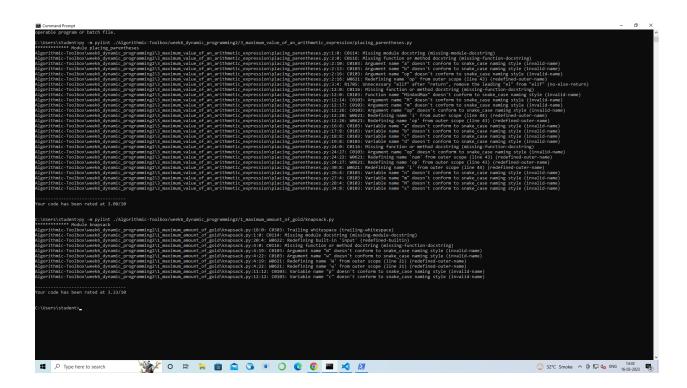
https://github.com/rishabh1005/Algorithmic-Toolbox/blob/master/week6\_dynamic\_programming2/3\_maximum\_value\_of\_an\_arithmetic\_expression/placing\_parentheses.py

## Tool Output:



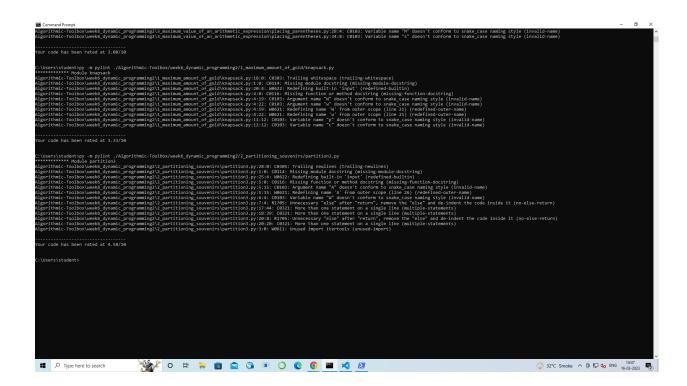
(2)

https://github.com/rishabh1005/Algorithmic-Toolbox/blob/master/week6\_dynamic\_programming2/1\_maximum\_amount\_of\_gold/knapsack.py



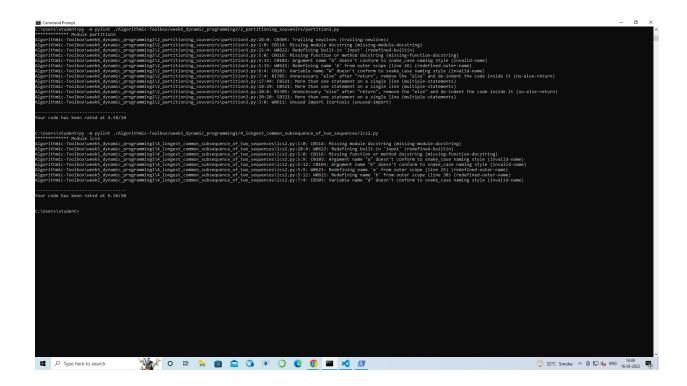
(3)

https://github.com/rishabh1005/Algorithmic-Toolbox/blob/master/week6\_dynamic\_programming2/2\_partitioning\_souvenirs/partition3.py



(4)

https://github.com/rishabh1005/Algorithmic-Toolbox/blob/master/week5\_dynamic\_programming1/4\_longest\_common\_subsequence\_of\_two\_sequences/lcs2.py



(5)

https://github.com/rishabh1005/Algorithmic-Toolbox/blob/master/week5\_dynamic\_programming1/3\_edit\_distance/edit\_distance.py

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## **Understanding Errors:**

- (1) C0303: Trailing whitespace (trailing-whitespace): Used when there is whitespace between the end of a line and the newline.
- (2) C0114/C0ll6: Missing module docstring/function docstring: This indicates that neither the modules nor the functions have a docstring defined. The docstring functions as a kind of comment or text explanation that the compiler ignores but which aids in explaining the function's or module's intended use to others. Writing docstrings is a wise move.
- (3) W0622: Redefining built-in 'input' (redefined-builtin): Used when a built-in is overridden by a variable or method.
- (4) C0103:The variable doesn't match the snake\_case naming style. The defined variable is not named using the snake\_case convention, as indicated by this error.
- (5) W0621: Redifining name from outerscope: This mistake indicates that a global variable with the same name as a local variable. By doing this, the global version of the variable is hidden and the local scope is changed to use the local version of the variable.

- (6) C0305: Trailing newlines (trailing-newlines): This error tells that there are trailing blank lines in a file.
- (7) R1705: Unnecessary "else" after "return", remove the "else" and de-indent the code inside it (no-else-return): This occurs when an else line is added following a "return" statement that is never actually executed.
- (8) C0321: More than one statement on a single line: This error tells that there is an on statement are found on the same line.