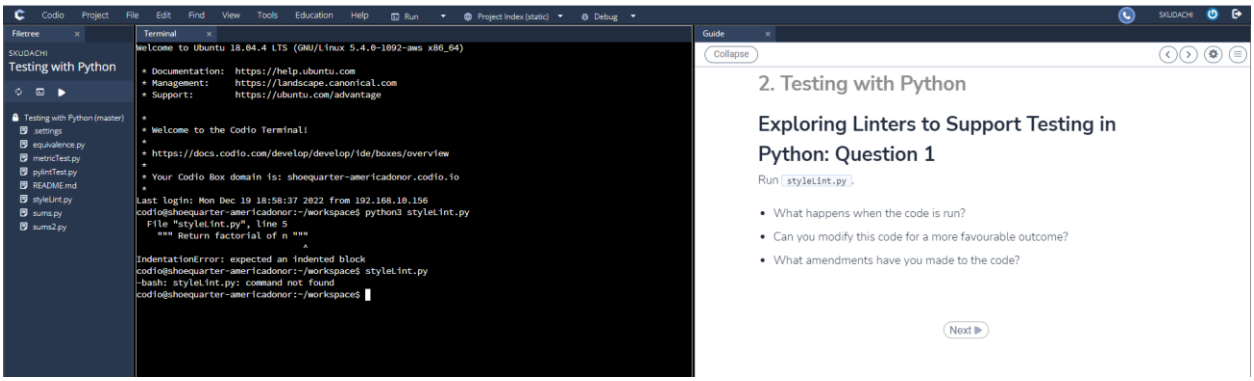
Linters:



What happens when the code is run?

The error message "IndentationError: expected an indented block" shows that the indentation in Python code is incorrect. In Python, indentation is used to denote code blocks. The code within a block of code, such as a function declaration, must therefore be indented.

Can you modify this code for a more favourable outcome? Yes

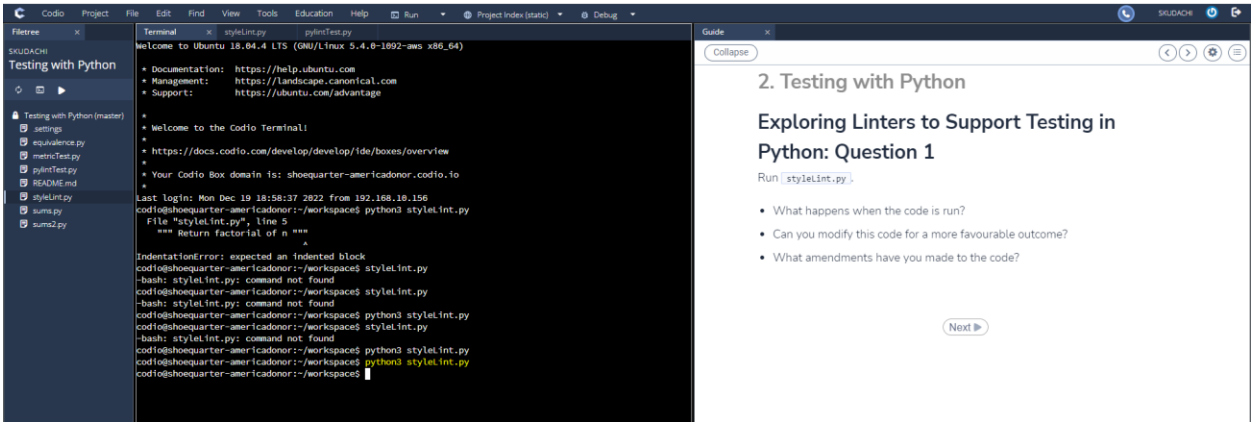
What amendments have you made to the code?

Code:

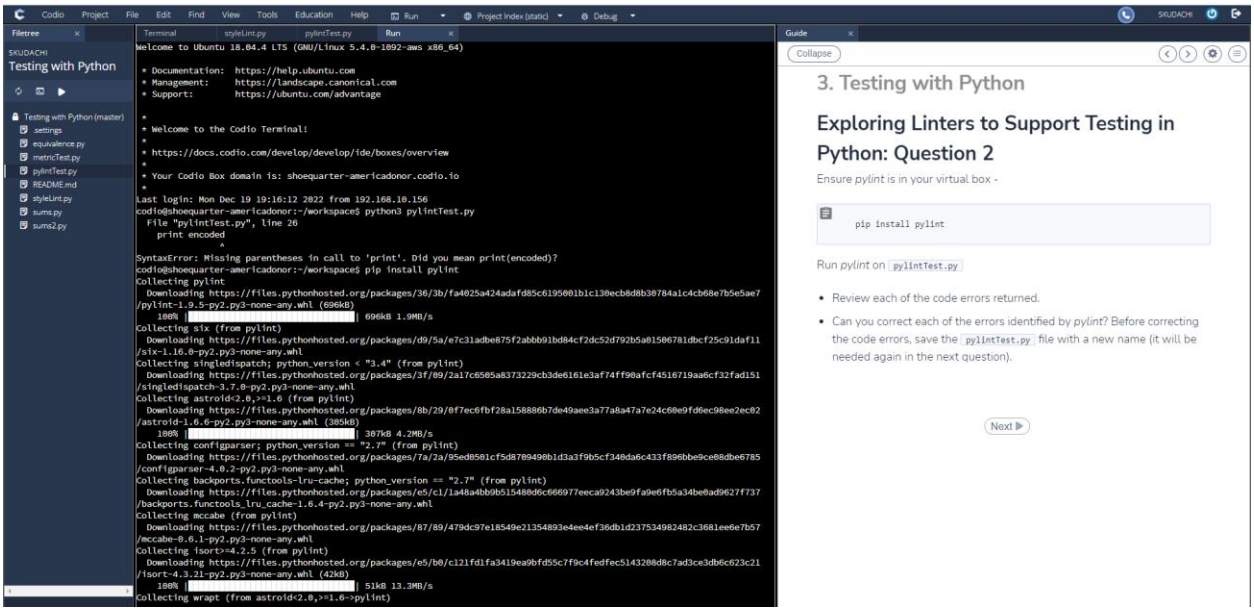
```
def factorial(n):
    """ Return factorial of n """
    if n == 0:
        return 1
    return n * factorial(n-1)
```

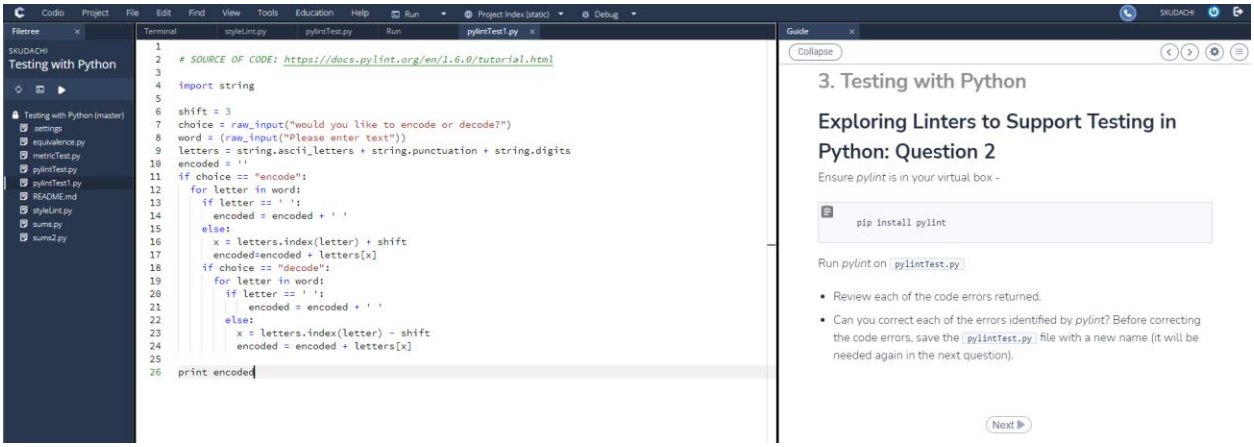
On line 5, I needed to appropriately indent the code block that follows the triple-quote string. I ensured that all lines of code within the block have the same number of spaces between them.

Screenshot:



Exploring Linters to Support Testing in Python: Question 2





I am currently unable to fix the Python code errors.

Exploring the Cyclomatic Complexity's Relevance Today

The cyclomatic complexity of a program or module is determined by the number of independent pathways through its code. Higher cyclomatic complexity can suggest a higher chance of bugs and a larger demand for testing.

Cyclomatic complexity is, in my opinion, a helpful statistic to examine when analyzing the design of a program or module, since it can assist identify portions of the code that may be more susceptible to bugs and vulnerabilities. However, it should not be the only statistic utilized; other aspects, such as the code's maintainability and readability, should also be considered.

In the context of designing secure software, cyclomatic complexity might be somewhat relevant, as an increase in complexity may raise the likelihood of security flaws. When considering the security of a program, it is not the only thing to consider. Other significant aspects are the use of secure coding methods, the implementation of security controls, and the ability to respond to security problems.

Cyclomatic complexity can be a helpful statistic to consider in software development, but it should not be the sole aspect used to evaluate the design and security of a program or module. In order to design secure and maintainable software, it is essential to consider a number of aspects.