

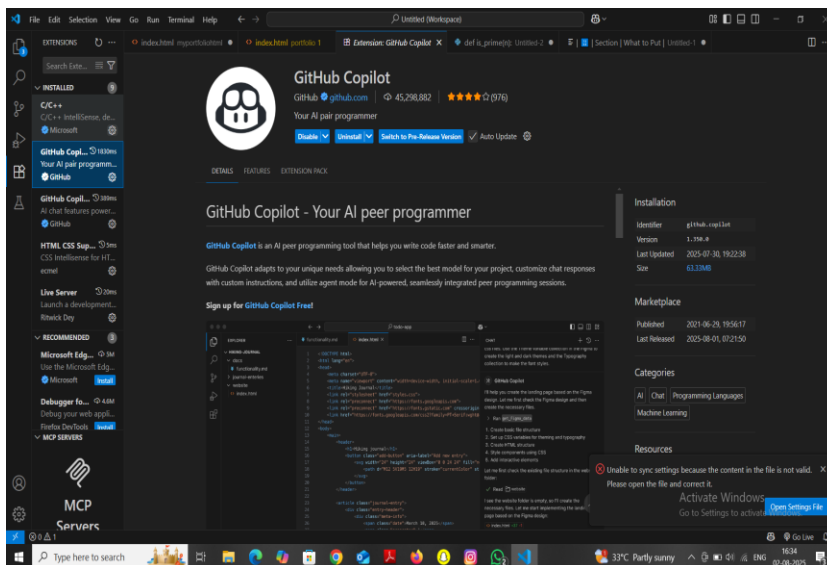
AI Assisted Coding Lab Assignment (1.4/24)


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Section : CS-AI B02

Task 1: GitHub Copilot Setup





Sign in to GitHub

Username or email address

Password

[Forgot password?](#)

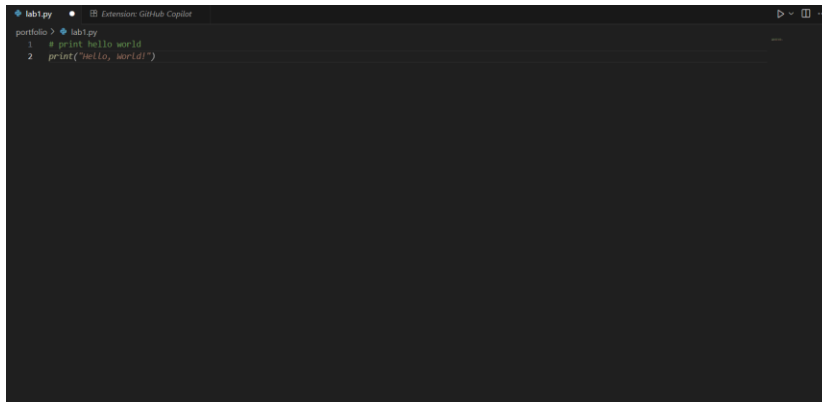
[Sign in](#)

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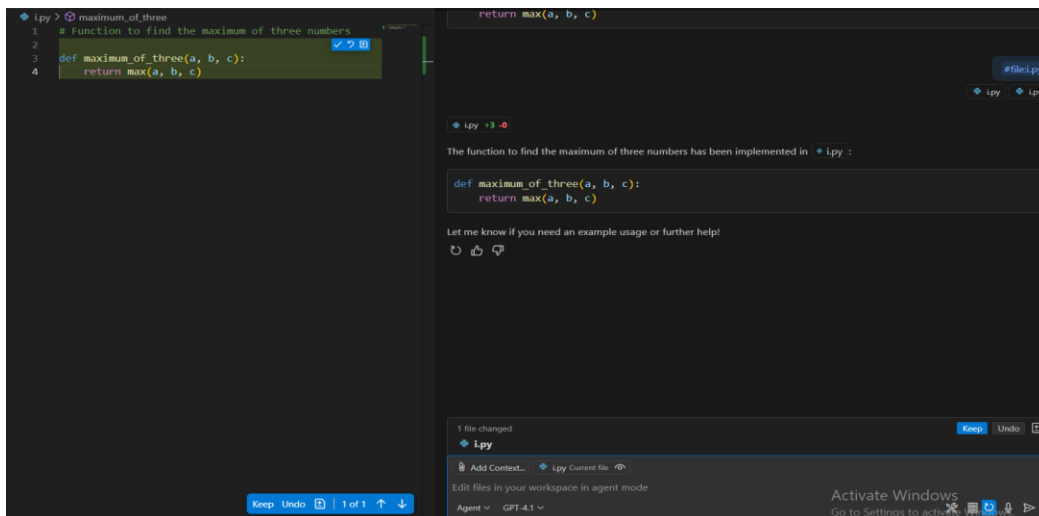
```
lab1.py • Extension: GitHub Copilot
portfolio > lab1.py
1 # print hello world
2 print("hello, world!")
```

Task 2: Maximum of Three Numbers

Prompt used:

Function to find the maximum of three numbers

Code:



```
lpy > maximum_of_three
1 # Function to find the maximum of three numbers
2
3 def maximum_of_three(a, b, c):
4     return max(a, b, c)
```

```
return max(a, b, c)
```

#file1.py

lpy +3 -0

The function to find the maximum of three numbers has been implemented in lpy :

```
def maximum_of_three(a, b, c):
    return max(a, b, c)
```

Let me know if you need an example usage or further help!

1 file changed

lpy

Add Context... lpy Current file

Edit files in your workspace in agent mode

Agent GPT-4.1

Keep Undo 1 of 1

Activate Windows
Go to Settings to activate Windows

Explanation:

The function uses Python's built-in `max()` function to return the largest of the three inputs.

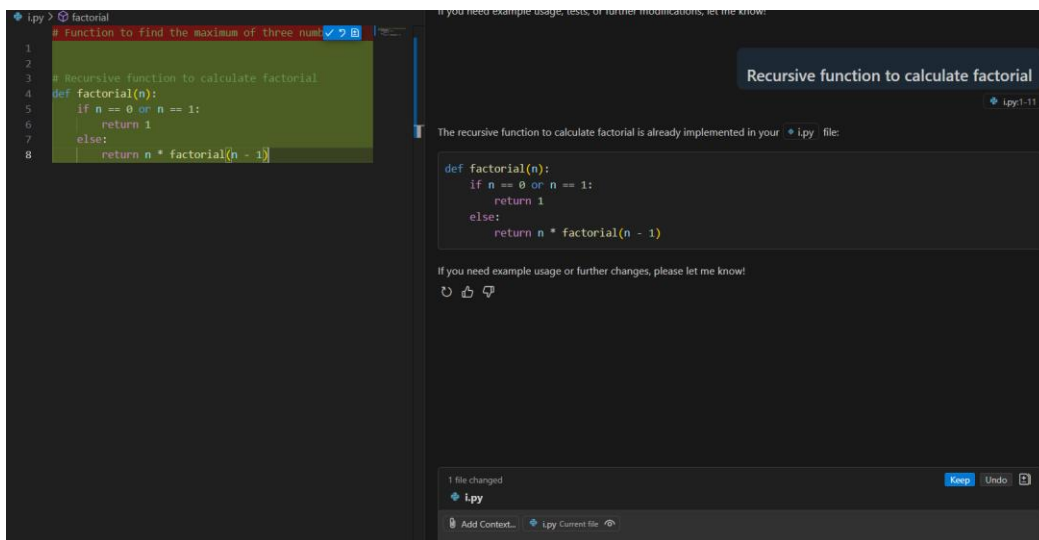
Sample Output:
Maximum is: 25

Task 3: Factorial (Recursive)

Prompt used:

Recursive function to calculate factorial

Code:



The screenshot shows a Jupyter Notebook with a file named 'lpy'. The code in the notebook is as follows:

```
1 # Function to find the maximum of three num
2
3 # Recursive function to calculate factorial
4 def factorial(n):
5     if n == 0 or n == 1:
6         return 1
7     else:
8         return n * factorial(n - 1)
```

On the right side of the notebook, there is a panel titled 'Recursive function to calculate factorial'. It contains the same code snippet and a message: 'The recursive function to calculate factorial is already implemented in your * lpy file:'. Below this, there is a small icon and the text 'If you need example usage or further changes, please let me know!'. At the bottom of the notebook, there is a status bar showing '1 file changed' and 'lpy'.

Explanation:

The function calls itself recursively until n becomes 1 or 0, which is the base case.

Sample Output:
Factorial of 5 is: 120

Task 4: Student Class

Prompt used:

Define a class Student with name, roll_no, marks and display method

Code:

```
1 |
2 |
3 | # Define a class Student with name, roll_no, marks a
4 | class Student:
5 |     def __init__(self, name, roll_no, marks):
6 |         self.name = name
7 |         self.roll_no = roll_no
8 |         self.marks = marks
9 |
10 |
11 |     def display(self):
12 |         print(f"Name: {self.name}")
13 |         print(f"Roll No: {self.roll_no}")
14 |         print(f"Marks: {self.marks}")
```

Define a class Student with name, roll_no, marks and display method

The `Student` class with `name`, `roll_no`, `marks`, and a `display` method has been added to your `ipy` file.

Let me know if you need an example of how to use this class or any further help!

1 file changed
ipy
Add Content... ipy Current file

Edit files in your workspace in agent mode

Agent GPT-4.1

Activate Windows
Go to Settings to activate Windows

Explanation:

This class defines a constructor (`__init__`) and a method `display()` to print the details of a student object.

Sample Output:

Name: Aluwala Sharanya

Roll No: 2403A52013

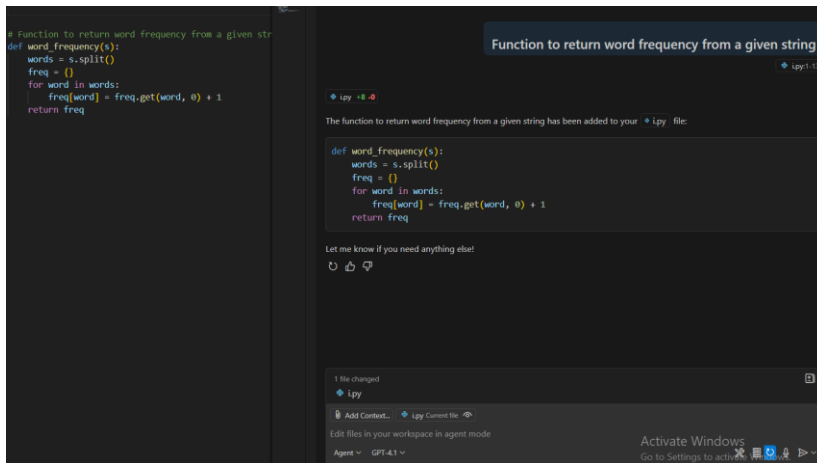
Marks: 89

Task 5: Word Frequency

Prompt used:

Function to return word frequency from a given string

Code:



Explanation:

The function splits the input string into words, converts them to lowercase, and uses a dictionary to count how many times each word appears.

Sample Output:

```
{'ai': 2, 'makes': 1, 'coding': 2, 'easier': 1, 'is': 1, 'fun': 1, 'with': 1}
```