

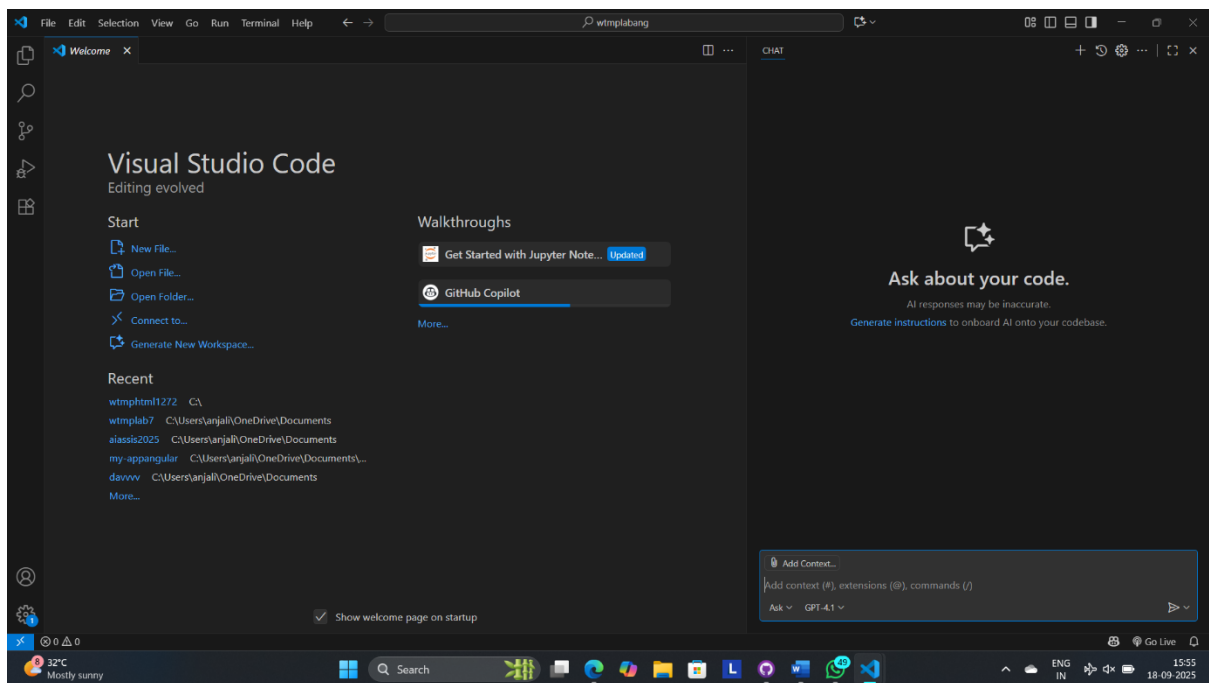
Assignment-1.4

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Task-1:

Install and configure GitHub Copilot in VS Code.



Task-2:

Prompt: Give a function in python that returns the maximum of three numbers that is entered by user.

Code:

```
def max_of_three():
```

```
    a = float(input("Enter first number: "))
```

```
    b = float(input("Enter second number: "))
```

```
    c = float(input("Enter third number: "))
```

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

```
result = max_of_three()
```

```
print("The maximum number is:", result)
```

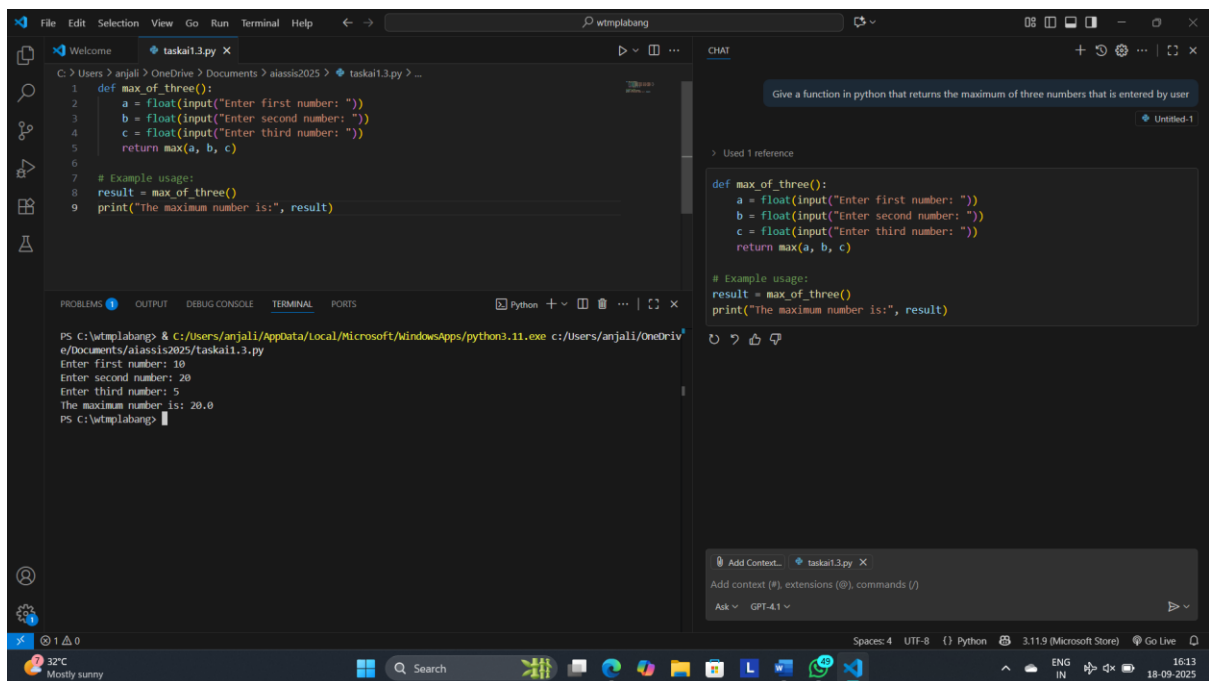
Output:

Enter first number: 10

Enter second number: 20

Enter third number: 5

The maximum number is: 20.0



The screenshot shows a Visual Studio Code editor window with a Python file named `task1.3.py`. The code defines a function `max_of_three()` that takes three inputs and returns the maximum. The terminal shows the execution of the script, which prompts the user for three numbers (10, 20, 5) and outputs the maximum value, 20.0. The chat panel on the right shows a prompt: "Give a function in python that returns the maximum of three numbers that is entered by user".

```
def max_of_three():
    a = float(input("Enter first number: "))
    b = float(input("Enter second number: "))
    c = float(input("Enter third number: "))
    return max(a, b, c)

# Example usage:
result = max_of_three()
print("The maximum number is:", result)
```

```
PS C:\wtmp\labang> & c:\Users\anjali\AppData\Local\Microsoft\WindowsApps\python3.11.exe c:\Users\anjali\OneDriv
e\Documents\aiasss2025\task1.3.py
Enter first number: 10
Enter second number: 20
Enter third number: 5
The maximum number is: 20.0
PS C:\wtmp\labang>
```

Task-3:

Prompt:

create a recursive Python function that calculates the factorial of a number entered by user.

Code:

```
def factorial(n):
```

```
    if n == 0 or n == 1:
```

```
        return 1
```

```
    else:
```

```
        return n * factorial(n - 1)
```

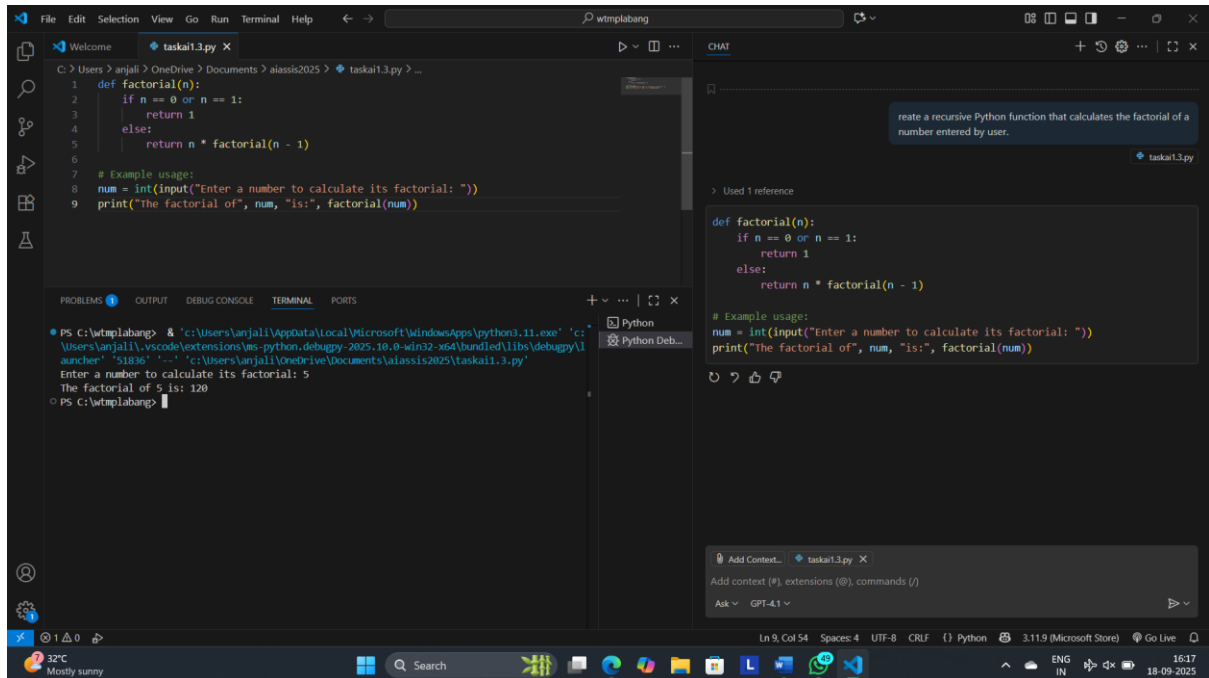
```
num = int(input("Enter a number to calculate its factorial: "))
```

```
print("The factorial of", num, "is:", factorial(num))
```

Output:

Enter a number to calculate its factorial: 5

The factorial of 5 is: 120



The screenshot shows a VS Code editor with a file named `taskai1.3.py`. The code defines a recursive function `factorial(n)` and includes an example usage. The terminal output shows the program being run, the input '5', and the output 'The factorial of 5 is: 120'. A chat window on the right shows a prompt to create a recursive Python function for factorial calculation, and the code from the editor is pasted into it.

```
def factorial(n):
    if n == 0 or n == 1:
        return 1
    else:
        return n * factorial(n - 1)

# Example usage:
num = int(input("Enter a number to calculate its factorial: "))
print("The factorial of", num, "is:", factorial(num))
```

```
PS C:\wtmp\labang> & 'c:\Users\anjali\AppData\Local\Microsoft\WindowsApps\python3.11.exe' 'c:\Users\anjali\vscode\extensions\ms-python.debugpy-2025.18.0-win32-x64\bundled\libs\debugpy\launcher' '51836' '-.' 'c:\Users\anjali\OneDrive\Documents\aiass1s2025\taskai1.3.py'
Enter a number to calculate its factorial: 5
The factorial of 5 is: 120
PS C:\wtmp\labang>
```

Task-4:

Prompt:

Create a class named Student with attributes name, roll_no, and marks. Add a method to display student details.

Code:

class Student:

```
def __init__(self, name, roll_no, marks):
```

```
    self.name = name
```

```
    self.roll_no = roll_no
```

```
    self.marks = marks
```

```
def display_details(self):
```

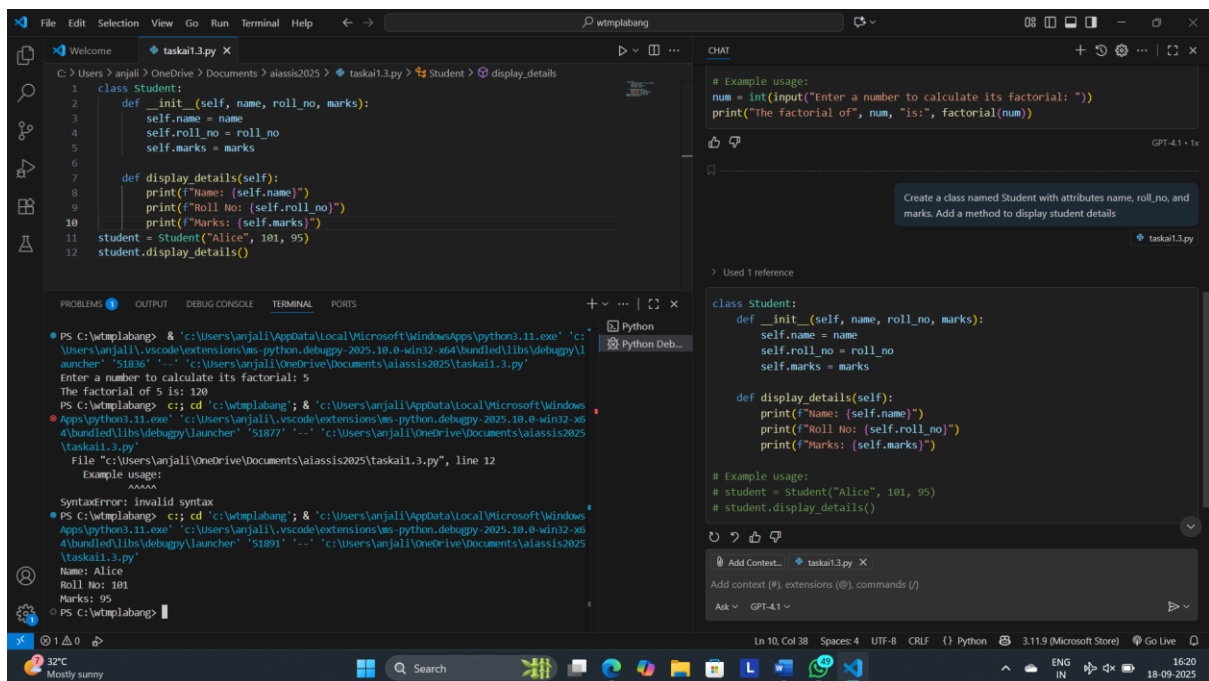
```
    print(f"Name: {self.name}")
```

```
    print(f"Roll No: {self.roll_no}")
```

```
    print(f"Marks: {self.marks}")
```

```
student = Student("Alice", 101, 95)
```

Marks: 95



return freq

Example input:

text = "This is a test. This test is simple."

print(word_frequency(text))

Output:

{'this': 2, 'is': 2, 'a': 1, 'test.': 1, 'test': 1, 'simple.': 1}

