

Introduction to Programming

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The screenshot shows the Microsoft Visual Studio Code (VS Code) interface. The main area displays a Python script named `Exercise 1.py` with the following code:

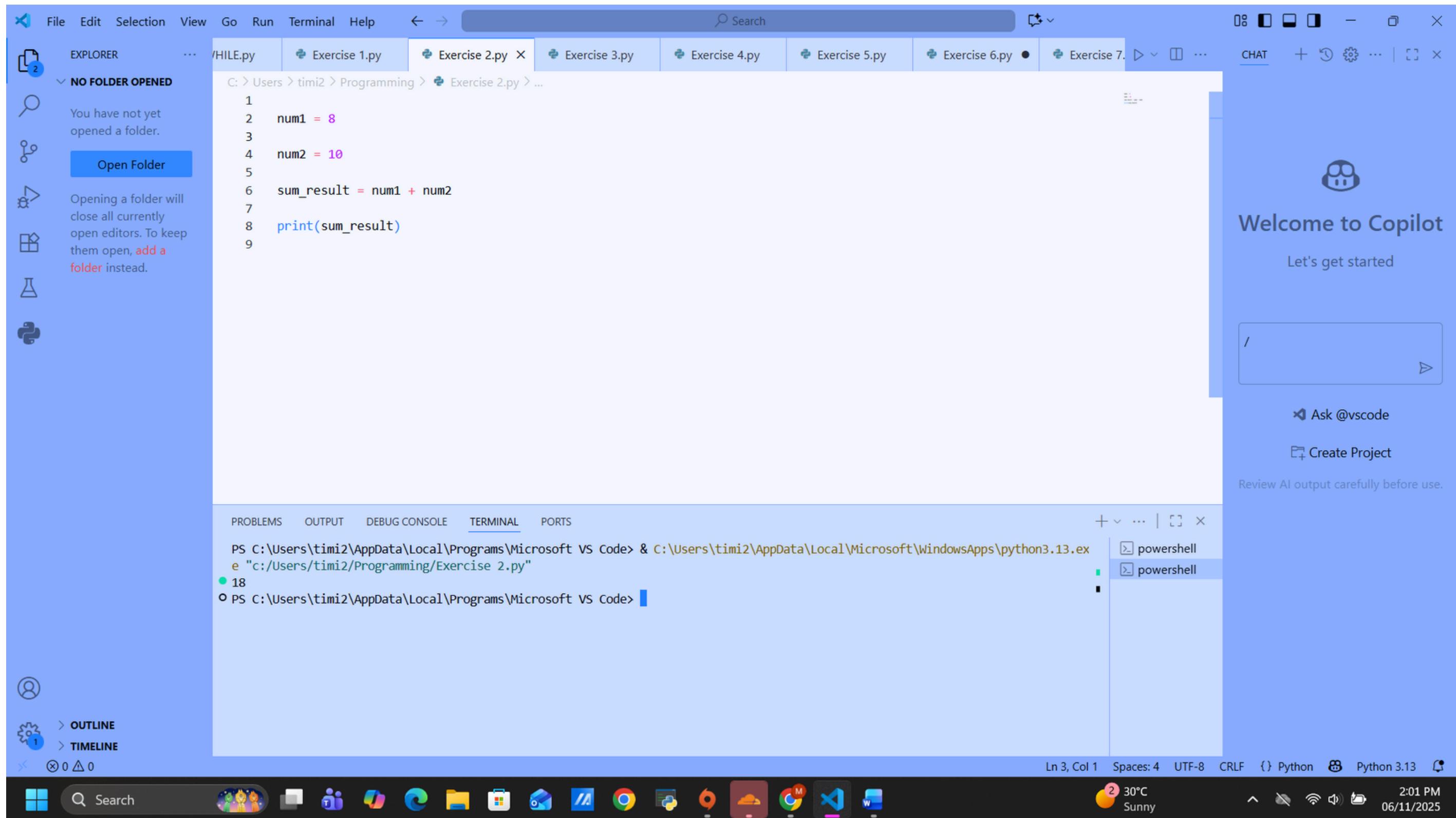
```
1 word1 = "Coding"
2 word2 = "is"
3 word3 = "Cool"
4
5 print(word1 + " " + word2 + " " + word3)
6
```

The terminal below shows the output of running the script:

```
PS C:\Users\timi2\AppData\Local\Programs\Microsoft VS Code> & C:\Users\timi2\AppData\Local\Microsoft\WindowsApps\python3.13.exe "c:/Users/timi2/Programming/Exercise 1.py"
Coding is Cool
PS C:\Users\timi2\AppData\Local\Programs\Microsoft VS Code>
```

The interface includes the following elements:

- EXPLORER** sidebar: Shows a message about no folder being opened and provides options to open a folder or add a folder.
- Search bar**: Located at the top center.
- Editor tabs**: Multiple tabs for files like `Exercise 1.py`, `Exercise 2.py`, etc.
- Copilot panel**: On the right, featuring a welcome message, a text input field, and buttons for asking questions and creating projects.
- Terminal tab**: Shows the command line history and the execution of the Python script.
- Bottom status bar**: Displays file path, line number, column number, encoding, and other system information.



The screenshot shows the Microsoft Visual Studio Code (VS Code) interface. The main area displays a Python script named `Exercise 3.py` with the following code:

```
1 bio = {  
2     "name": "Marc Joshua Domingo",  
3     "hometown": "Manila",  
4     "age": 18  
5 }  
6  
7  
8 print("Name:", bio["name"], "\nHometown:", bio["hometown"], "\nAge:", bio["age"])  
9  
10
```

The terminal below shows the output of running the script with Python 3.13:

```
PS C:\Users\timi2\AppData\Local\Programs\Microsoft VS Code> & C:\Users\timi2\AppData\Local\Microsoft\WindowsApps\python3.13.exe "c:/Users/timi2/Programming/Exercise 3.py"  
● Name: Marc Joshua Domingo  
Hometown: Manila  
Age: 18  
○ PS C:\Users\timi2\AppData\Local\Programs\Microsoft VS Code>
```

The right sidebar features the "Welcome to Copilot" panel, which includes a search bar, a button to "Ask @vscode", and a "Create Project" button. It also displays a weather forecast for London: 30°C, Sunny.

At the bottom, the taskbar shows various pinned icons, and the system tray indicates the date as 06/11/2025 and the time as 2:02 PM.

The screenshot shows the Microsoft Visual Studio Code interface. On the left, the Explorer sidebar indicates "NO FOLDER OPENED" and provides options to "Open Folder". The main editor window displays a Python script named "Exercise 4.py" which contains a quiz program. The script defines a dictionary of European capitals and uses a for loop to interactively ask the user for the capital of each country, providing immediate feedback on whether the answer is correct or wrong. Below the editor, the Terminal tab shows the execution of the script in a PowerShell window, displaying the quiz results. A Copilot panel on the right side of the interface shows a welcome message and a text input field with a placeholder "/".

```
quiz = {  
    "France": "Paris",  
    "Germany": "Berlin",  
    "Italy": "Rome",  
    "Spain": "Madrid",  
    "United Kingdom": "London",  
    "Portugal": "Lisbon",  
    "Netherlands": "Amsterdam",  
    "Switzerland": "Bern",  
    "Norway": "Oslo",  
    "Greece": "Athens"  
}  
  
score = 0  
  
print("== European Capitals Quiz ==")  
  
for country, capital in quiz.items():  
    answer = input(f"What is the capital of {country}? ")  
  
    if answer.lower() == capital.lower():  
        print("✅ Correct!")  
    else:  
        print("❌ Wrong! The correct answer is", capital)  
  
What is the capital of France? Paris  
✅ Correct!  
What is the capital of Germany? Idk  
❌ Wrong! The correct answer is Berlin.  
What is the capital of Italy?
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS C:\Users\timi2\AppData\Local\Programs\Microsoft VS Code & C:\Users\timi2\AppData\Local\Microsoft\WindowsApps\python3.13.exe "c:/Users/timi2/Programming/Exercise 4.py"
== European Capitals Quiz ==
What is the capital of France? Paris
✅ Correct!
What is the capital of Germany? Idk
❌ Wrong! The correct answer is Berlin.
What is the capital of Italy?

Ln 1, Col 1 Spaces: 4 UTF-8 CRLF {} Python Python 3.13

30°C Sunny 2:03 PM 06/11/2025

The screenshot shows the Microsoft Visual Studio Code (VS Code) interface. The main area displays a Python script named `Exercise 5.py` with the following code:

```
1 days_in_month = {
2     1: 31,
3     2: 28,
4     3: 31,
5     4: 30,
6     5: 31,
7     6: 30,
8     7: 31,
9     8: 31,
10    9: 30,
11    10: 31,
12    11: 30,
13    12: 31
14 }
15
16
17
18 month = int(input("Enter the month number (1-12): "))
19
20 if month in days_in_month:
21     if month == 2:
22         leap = input("Is it a leap year? (yes/no): ").lower()
23         if leap == "yes":
```

The terminal tab at the bottom shows the following output:

```
PS C:\Users\timi2\AppData\Local\Programs\Microsoft VS Code> & C:\Users\timi2\AppData\Local\Microsoft\WindowsApps\python3.13.exe "c:/Users/timi2/Programming/Exercise 5.py"
● Enter the month number (1-12): 11
Month 11 has 30 days.
○ PS C:\Users\timi2\AppData\Local\Programs\Microsoft VS Code>
```

The right side of the screen features the "Welcome to Copilot" interface, which includes a search bar, a "Let's get started" button, and options like "Ask @vscode" and "Create Project". It also includes a note: "Review AI output carefully before use."

The screenshot shows the Microsoft Visual Studio Code (VS Code) interface. The main area displays a Python script named `Exercise 6.py` with the following code:

```
1 correct_password = "12345"
2
3
4
5 while True:
6     entry = input("Enter password: ")
7     if entry == correct_password:
8
9         print("Access granted. Welcome!")
10        break
11    else:
12        print("Incorrect password. Try again.")
13
```

The terminal below shows the execution of the script:

```
PS C:\Users\timi2\AppData\Local\Programs\Microsoft VS Code> & C:\Users\timi2\AppData\Local\Microsoft\WindowsApps\python3.13.exe "c:/Users/timi2/Programming/Exercise 6.py"
Enter password: 12345
Access granted. Welcome!
```

The right sidebar features the "Welcome to Copilot" panel, which includes a search bar, a "Let's get started" button, and options to "Ask @vscode" or "Create Project". It also includes a note to "Review AI output carefully before use."

The bottom status bar shows the file path `C:\Users\timi2\Programming> Exercise 6.py`, line 2, column 26, and other details like `Spaces: 4`, `UTF-8`, and `CRLF`.

The screenshot shows the Microsoft Visual Studio Code (VS Code) interface. The main area displays a Python script named `Exercise 7.py` with the following code:

```
4
5     print()
6
7
8     print("Counting down from 50 to 0:")
9     for i in range(50, -1, -1):
10        print(i)
11
12     print()
13
14
15     print("Counting up from 30 to 50:")
16     for i in range(30, 51):
17        print(i)
18
19     print()
20
21
22     print("Counting down from 50 to 10 (step -2):")
23     for i in range(50, 9, -2):
24        print(i)
25
26     print()
```

The terminal below shows the output of running the script with Python:

```
PS C:\Users\timi2\AppData\Local\Programs\Microsoft VS Code> & C:\Users\timi2\AppData\Local\Microsoft\WindowsApps\python3.13.exe "c:/Users/timi2/Programming/Exercise 7.py"
● Counting up from 0 to 50:
0
1
2
3
4
5
6
7
8
9
```

The status bar at the bottom indicates the code is in Python 3.13 mode.

A sidebar on the right is titled "Welcome to Copilot" and includes a search bar, an "Ask @vscode" button, and a "Create Project" button. It also features a weather widget showing 30°C and sunny conditions.

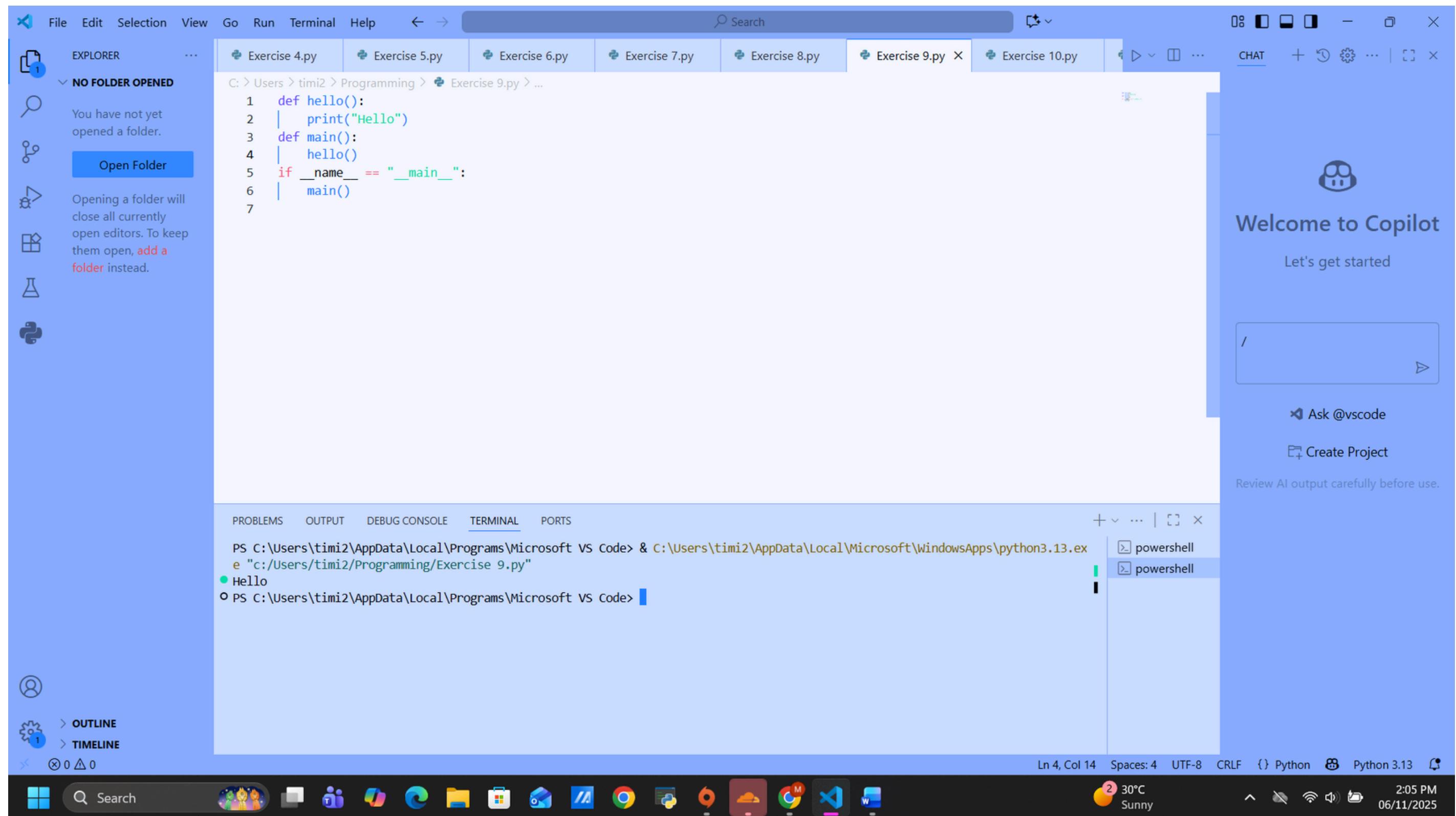
The screenshot shows the Microsoft Visual Studio Code interface. The top bar includes File, Edit, Selection, View, Go, Run, Terminal, Help, and a search bar. The title bar shows the current file is Exercise 8.py. The Explorer sidebar indicates "NO FOLDER OPENED" and has an "Open Folder" button. The main editor area contains the following Python code:

```
C: > Users > timi2 > Programming > Exercise 8.py > [e] names
1 names = ["Jake", "Zac", "Ian", "Ron", "Sam", "Dave"]
2
3
4 search_name = input("Enter the name to search for: ")
5
6
7 if search_name in names:
8     print(f"{search_name} was found in the list!")
9 else:
10    print(f"{search_name} was NOT found in the list.")
11
```

The terminal tab at the bottom shows the output of running the script:

```
PS C:\Users\timi2\AppData\Local\Programs\Microsoft VS Code> & C:\Users\timi2\AppData\Local\Microsoft\WindowsApps\python3.13.exe "c:/Users/timi2/Programming/Exercise 8.py"
Enter the name to search for: Jake
Jake was found in the list!
```

The status bar at the bottom right shows the date and time (06/11/2025, 2:04 PM), weather (30°C, Sunny), and battery level.



The screenshot shows the Microsoft Visual Studio Code (VS Code) interface. The main area displays a Python script named `Exercise 10.py` with the following code:

```
C: > Users > timi2 > Programming > Exercise 10.py > main
1 def check_even_odd(number):
2     if number % 2 == 0:
3         return f"{number} is even."
4     else:
5         return f"{number} is odd."
6
7 def main():
8     user_input = int(input("Enter a number: "))
9
10    result = check_even_odd(user_input)
11
12    print(result)
13
14 if __name__ == "__main__":
15     main()
```

The terminal below shows the execution of the script and its output:

```
PS C:\Users\timi2\AppData\Local\Programs\Microsoft VS Code & C:\Users\timi2\AppData\Local\Microsoft\WindowsApps\python3.13.exe "c:/Users/timi2/Programming/Exercise 10.py"
● Enter a number: 5
5 is odd.
● PS C:\Users\timi2\AppData\Local\Programs\Microsoft VS Code & C:\Users\timi2\AppData\Local\Microsoft\WindowsApps\python3.13.exe "c:/Users/timi2/Programming/Exercise 10.py"
Enter a number: 4
4 is even.
```

The right side of the screen features the Microsoft Copilot AI interface, which includes a welcome message, a search bar, and buttons for "Ask @vscode" and "Create Project". A note at the bottom of the Copilot panel says "Review AI output carefully before use."