

The screenshot shows the Microsoft Visual Studio Code (VS Code) interface. The main area displays a Python file named `2.4.1.py` with the following code:

```
1 class Book:
2     def __init__(self, title, author):
3         self.title = title
4         self.author = author
5
6     def summary(self):
7         return f'{self.title} is written by {self.author}.'
8 # Example usage:
9 book1 = Book("To Kill a Mockingbird", "Harper Lee")
10 print(book1.summary())
```

The terminal at the bottom shows the execution of the script:

```
PS C:\Users\sathw\Documents\AI-Assisted-Coding> & 'c:\Users\sathw\AppData\Local\Microsoft\WindowsApps\python3.13.exe' 'c:\Users\sathw\.vscode\extensions\ms-python.debugpy-2025.18.0-win32-x64\bundled\libs\debugpy\launcher' '6225' '--' 'C:\Users\sathw\Documents\AI-Assisted-Coding\2.4.1.py'
'To Kill a Mockingbird' is written by Harper Lee,
PS C:\Users\sathw\Documents\AI-Assisted-Coding>
```

A sidebar on the right is titled "Build with Agent" and includes a message: "AI responses may be inaccurate. Generate Agent Instructions to onboard AI onto your codebase." Below this is a "Describe what to build next" input field and a "Agent" dropdown set to "Auto".

The screenshot shows a Microsoft Visual Studio Code (VS Code) interface with several windows open. The main editor window displays a Python script named `2.4.2.py`. The code defines a list of users and sorts them by age using a lambda function. A conditional block checks if the script is run from the main module and prints the sorted list. The terminal window below shows the execution of the script, resulting in the output: `[{"name": "Ashok", "age": 25}, {"name": "Bobby", "age": 20}, {"name": "mohan", "age": 30}]` followed by `[{"name": "Bobby", "age": 20}, {"name": "Ashok", "age": 25}, {"name": "mohan", "age": 30}]`, indicating a bug where the list is printed twice. To the right of the editor, there is an AI-assisted build interface titled "Build with Agent". It includes a speech bubble icon, a message stating "AI responses may be inaccurate.", and instructions to "Generate Agent Instructions to onboard AI onto your codebase." The bottom right corner features a "Describe what to build next" input field and a "Agent" dropdown.

```
2.4.2.py > ...
1 users = [
2     {"name": "Ashok", "age": 25},
3     {"name": "Bobby", "age": 20},
4     {"name": "mohan", "age": 30}
5 ]
6
7 def sort_by_age(user_list):
8     return sorted(user_list, key=lambda user: user["age"])
9
10
11 if __name__ == "__main__":
12     sorted_users = sort_by_age(users)
13     print(sorted_users)
14

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS + × ... | ☰ ×
PS C:\Users\sathw\Documents\AI-Assisted-Coding> c;; cd 'C:\Users\sathw\Documents\AI-Assisted-Coding'
; & 'c:\Users\sathw\AppData\Local\Microsoft\WindowsApps\python3.13.exe' 'c:\Users\sathw\.vscode\extensions\ms-python.debugpy-2025.18.0-win32-x64\bundled\libs\debugpy\launcher' '62628' --- 'C:\Users\sathw\Documents\AI-Assisted-Coding\2.4.2.py'
[{"name": "Ashok", "age": 25}, {"name": "Bobby", "age": 20}, {"name": "mohan", "age": 30}]
PS C:\Users\sathw\Documents\AI-Assisted-Coding> ^c
PS C:\Users\sathw\Documents\AI-Assisted-Coding>
PS C:\Users\sathw\Documents\AI-Assisted-Coding> c;; cd 'C:\Users\sathw\Documents\AI-Assisted-Coding'
; & 'c:\Users\sathw\AppData\Local\Microsoft\WindowsApps\python3.13.exe' 'c:\Users\sathw\.vscode\extensions\ms-python.debugpy-2025.18.0-win32-x64\bundled\libs\debugpy\launcher' '56020' --- 'C:\Users\sathw\Documents\AI-Assisted-Coding\2.4.2.py'
[{"name": "Bobby", "age": 20}, {"name": "Ashok", "age": 25}, {"name": "mohan", "age": 30}]
PS C:\Users\sathw\Documents\AI-Assisted-Coding>

Build with Agent
AI responses may be inaccurate.
Generate Agent Instructions to onboard AI onto your codebase.

Describe what to build next
Agent Auto
```

The screenshot shows the Microsoft Visual Studio Code (VS Code) interface. The main area displays a Python script named `2.4.3.py` with the following code:

```
def add(a, b):
    return a + b

def subtract(a, b):
    return a - b

def multiply(a, b):
    return a * b

def divide(a, b):
    if b == 0:
        return "Error: Division by zero"
    return a / b

if __name__ == "__main__":
    a = float(input("Enter first number: "))
    b = float(input("Enter second number: "))

    print("Addition:", add(a, b))
    print("Subtraction:", subtract(a, b))
    print("Multiplication:", multiply(a, b))
    print("Division:", divide(a, b))
```

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

```
PS C:\Users\sathw\Documents\AI-Assisted-Coding> python 2.4.3.py
Enter first number: 12
Enter second number: 3
Addition: 15.0
Subtraction: 9.0
Multiplication: 36.0
Division: 4.0
PS C:\Users\sathw\Documents\AI-Assisted-Coding>
```

The left sidebar shows the Extensions view with several installed extensions listed:

- GitHub Copilot Chat (290ms)
- Python (396ms)
- Python Environments (121ms)
- Cursor AI (19ms)
- Pylance (1826ms)
- Container Tools (8.3M)
- GitLens — Git supercharged (46.0M)

The status bar at the bottom indicates the file is 3.13.9 (Microsoft Store) and the date is 19-01-2026.

The screenshot shows the Microsoft Visual Studio Code (VS Code) interface. The main area displays a Python script named `2.4.4.py` with the following code:

```
def is_armstrong(num):
    digits = str(num)
    power = len(digits)
    total = sum(int(digit) ** power for digit in digits)
    return total == num

if __name__ == "__main__":
    number = int(input("Enter a number: "))

    if is_armstrong(number):
        print("Armstrong Number")
    else:
        print("Not an Armstrong Number")
```

The left sidebar shows the Extensions view with several installed extensions listed under the `INSTALLED` section:

- GitHub Copilot Chat** (390ms)
- Python** (396ms)
- Python Environments** (121ms)
- Cursor AI** (19ms)
- Pylance** (1826ms)

Under the `RECOMMENDED` section, the following extensions are listed:

- Container Tools** (8.0M)
- GitLens — Git supercharged** (46.0M)

The bottom status bar shows system information including the date (19-01-2026), time (13:59), and battery level (28°C). A tooltip for the `Build with Agent` button indicates: "AI responses may be inaccurate. Generate Agent Instructions to onboard AI onto your codebase."