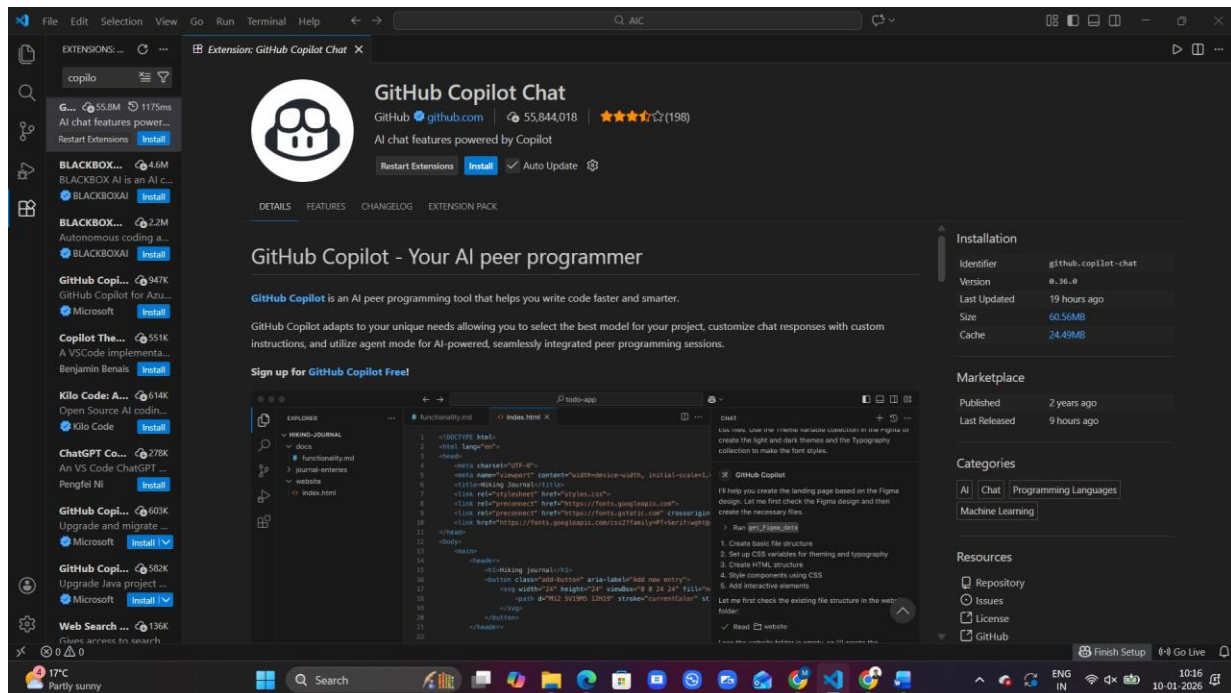**LAB 1.2 -**

**Environment Setup – GitHub Copilot and VS Code Integration +
Understanding AI-assisted Coding Workflow**

❖ **Set up GitHub Copilot in VS Code successfully.**

```
DEMO.PY
 1    #Reverse a string in python
 2    def reverse_string(s):
 3        return s[::-1]
 4    #Example usage
 5    input_string = "Hello, World!"
 6    reversed_string = reverse_string(input_string)
 7    print("Original String:", input_string)
 8    print("Reversed String:", reversed_string)
 9    # Output:
10    # Original String: Hello, World!
11    # Reversed String: !dlroW ,olleH
```

❖ **Use inline comments and context to generate code with Copilot.**

❖ **Evaluate AI-generated code for correctness and readability.**

```
#optimise the code
def reverse_string(s):
    return ''.join(reversed(s))
#Example usage
input_string = "Hello, World!"
reversed_string = reverse_string(input_string)
print("Original String:", input_string)
print("Reversed String:", reversed_string)
# Output:
# Original String: Hello, World!
# Reversed String: !dlroW ,olleH
#Optimized version using reversed() function
# The optimized version uses the built-in reversed() function which can be more efficient for larger strings.
# The optimized version uses the built-in reversed() function which can be more efficient for larger strings.
```

❖ **Compare code suggestions based on different prompts and programming styles.**