

LESSON 29 WORKBOOK

AI Coding Assistants

Module 4: Advanced AI Skills

Name		Date	
Coding Project		Status	■ Not Started ■ In Progress ■ Complete

Lesson Purpose

Learn how AI coding assistants can help write, explain, debug, optimize, and document code while improving productivity and supporting programmers and non-programmers alike.

Before You Begin

- I completed Lesson 28.
- I understand basic AI prompting.
- I will review and test AI-generated code before using it.

My Main Goal

Exercise 1

List five tasks AI coding assistants can help with, such as writing code, debugging, explaining code, documentation, or automation.

Exercise 2

Choose a simple programming or scripting task and describe how an AI coding assistant could help complete it.

Exercise 3

Identify three situations where human review and testing are essential before deploying AI-generated code.

Practical Coding Activity

Use an AI coding assistant to generate or improve a small piece of code, explain an existing script, or solve a programming problem. Record the prompts you used, the changes you made, and how you verified the results.

Prompt Practice

Prompt: "Act as an experienced software developer. Explain this code step by step, identify possible improvements, suggest best practices, and help me fix any errors while explaining why each change is needed."

Key Takeaways

My Practical Action Step

Reflection

Completion Checklist

- Completed all workbook exercises.
- Used an AI coding assistant for a practical task.
- Tested and reviewed AI-generated code.
- I am ready for Lesson 30.

Next Step

Continue to **Lesson 30 – AI Data Analysis**.