

# AI CODING TOOLS

Which tool fits YOUR task?

---

By: Alex Liao, Arnav Kakani, Sanjana Gowda,  
Shely Jain, and Mrinal Agarwal

# WHY IT MATTERS

- AI can help beginners write and learn code better.
- Not one tool can do it all, though:
  - Different tools shine in different scenarios.No one-size-fits all

**Today, we will explore 6 tools and run  
2 coding challenges (easy + hard)**

<<<<

---

ARTIFICIAL  
INTELLIGENCE  
(AI)

<<<<

01.

THE TOOLS

/ / / / / / / / /



## THE TOOLS



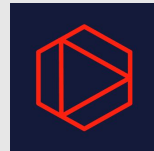
### GPT - 4o

The Q&A and debugging powerhouse.



### GITHUB COPILOT

Real time in-IDE completion.



### TABNINE

Privacy-first autocomplete.



### CLAUDE CODE

Clear, readable code generation.



### OLLAMA

A local, open-source model.



### CURSOR

All-in-one AI code editor and IDE.

<<<<

## CRITERIA

1. Interface Usability
2. Onboarding & Setup
3. Integration
4. Guidance & Feedback
5. Control & Transparency
6. Privacy & Cost



INTELLIGENCE (AI)

INTELLIGENCE (AI)

# TEST TASKS



## EASY TASK (PYTHON)

Write `is_palindrome(s)` ignoring spaces and punctuation.

Build a to-do list web app (add, remove, toggle complete), with basic styling and explanation.

## CHALLENGING TASK (JS/HTML)



# ARTIFICIAL INTELLIGENCE (AI)

# TEST TASK PROMPTS

Write a Python function called `is_palindrome(s)` that returns `True` if the input string is a palindrome, and `False` otherwise. Ignore spaces, punctuation, and case. Provide a few example test cases. Explain your solution clearly so a beginner can understand it.

Create a simple to-do list web app using HTML, CSS, and JavaScript. The app should allow users to add new tasks, mark tasks as complete/incomplete, and remove tasks. Style it so it looks clean. Also include clear comments in the code and explain how the code works so that a beginner can understand it.

# ARTIFICIAL INTELLIGENCE (AI)

02.

## TOOL-BY-TOOL DEMOS

Results for each AI tool.

---



# CHAT GPT (GPT - 40)

## Best For: Guided learning in a chat format

- **Interface Usability:** 9/10 (clean, conversational)
- **Onboarding & Setup:** 10/10 (instant in browser)
- **IDE Integration:** 4/10 (manual copy-paste)
- **Guidance & Feedback:** 10/10 (thorough and contextual)
- **Control & Transparency:** 7/10
- **Privacy & Cost:** 7/10 (free with limits, cloud-based)

ARTIFICIAL  
INTELLIGENCE  
(AI)

# GITHUB COPILOT

## Best For: Seamless coding inside IDEs

- **Interface Usability:** 8/10 (non-intrusive autocomplete)
- **Onboarding & Setup:** 7/10 (setup required in VS Code)
- **IDE Integration:** 10/10 (native plugin)
- **Guidance & Feedback:** 5/10 (limited explanations)
- **Control & Transparency:** 6/10
- **Privacy & Cost:** 7/10 (paid, student discounts)

ARTIFICIAL  
INTELLIGENCE  
(AI)

# TABNINE

**Best For: Lightweight autocomplete with privacy**

- **Interface Usability:** 7/10
- **Onboarding & Setup:** 8/10 (easy install)
- **IDE Integration:** 9/10 (built in terminal)
- **Guidance & Feedback:** 3/10 (minimal)
- **Control & Transparency:** 7/10
- **Privacy & Cost:** 9/10 (free + paid)

ARTIFICIAL  
INTELLIGENCE  
(AI)

# CLAUDE CODE

**Best For:** Detailed explanations, long context

- **Interface Usability:** 7/10
- **Onboarding & Setup:** 9/10 (setup in terminal)
- **IDE Integration:** 10/10
- **Guidance & Feedback:** 10/10
- **Control & Transparency:** 7/10
- **Privacy & Cost:** 6/10 (\$20/month)

ARTIFICIAL  
INTELLIGENCE  
(AI)

# OLLAMA

**Best For: Full privacy and local model hosting**

- **Interface Usability:** 6/10 (CLI or third-party GUI)
- **Onboarding & Setup:** 5/10 (manual model loading)
- **IDE Integration:** 2/10
- **Guidance & Feedback:** 6/10
- **Control & Transparency:** 10/10 (local)
- **Privacy & Cost:** 10/10 (free)

ARTIFICIAL  
INTELLIGENCE  
(AI)

# CURSOR

## Best For: Common development and debugging

- **Interface Usability:** 10/10 (same as VS Code)
- **Onboarding & Setup:** 10/10 (automatically integrate from VS code)
- **IDE Integration:** 10/10 (is its own IDE)
- **Guidance & Feedback:** 10/10 (wide range of models)
- **Control & Transparency:** 7/10
- **Privacy & Cost:** 8/10 (free + paid version)

# CONCLUSIONS

1. Guided learning or debugging: ChatGPT, Claude
2. Fast in-editor work: Copilot, Tabnine
3. Local-only development: Ollama
4. Most well-rounded product: Cursor

# GITHUB REPO WITH TEST RESULTS

SCAN THIS QR CODE:



ARTIFICIAL  
INTELLIGENCE  
(AI)



**THANK YOU! QUESTIONS?**

**ARTIFICIAL  
INTELLIGENCE  
(AI)**