



# Macro Programming

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## Experiential learning: Copilot automation

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## Microsoft Copilot in Excel 365

Microsoft Copilot is an **AI assistant built directly into Excel (Microsoft 365)**.

It uses **natural language prompts** to:

- Create, edit, and explain **VBA macros**
- Analyze and summarize **data**
- Generate **formulas** and **automation scripts**
- Format and visualize data automatically



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## How It Works

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1. Open Excel 365 → click the **Copilot icon** on the Ribbon.
2. A **Copilot chat pane** opens on the right side.
3. Type a **prompt** in plain English — e.g.  
“Create a VBA macro that highlights all cells above 500.”
4. Copilot:
  - Generates the VBA code.
  - Explains each section of the code.
  - Optionally inserts it into a module (if allowed by your environment).



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## When to Use Copilot in Excel

Scenario	Why It's Useful
Generating repetitive formatting macros	Saves time and avoids manual coding
Learning new syntax or logic	Great for beginners to understand structure
Testing ideas quickly	Prototype functions and refine later
Documenting code	Add comments and explanations automatically



# Macro Programming Limitations

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- Requires **Microsoft 365 Copilot license** (E3/E5 or Business Premium with add-on).
- Not available in **Excel standalone** or **Office 2021**.
- Works only for English-language prompts (currently).
- Generated code still needs **testing and debugging**.



## Experiential Learning: Using Bing Copilot

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- Open **Bing Copilot**.
- Type a VBA-related prompt in the chat, e.g.:

“Write a VBA macro to calculate average sales from range A2:A20.”

- Copy the generated code.
- Paste into the **VBA Editor** in Excel (Alt + F11 → Insert → Module).
- Run and test the code.



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