

5 Tips for Debugging Code

1 Learn error messages.

In many code environments, if your code is invalid or has a bug, it will spout out an error message.

3 common error messages you might see include:

1. **Syntax error:** this means that the **characters** were typed incorrectly (for example, a missing semicolon or misusing the assignment operator (=)).
2. **Semantic error:** this means a **word or variable** was used in the wrong place.
3. **Logic error:** this means the code is technically written without error, but the logic doesn't accomplish the goal.

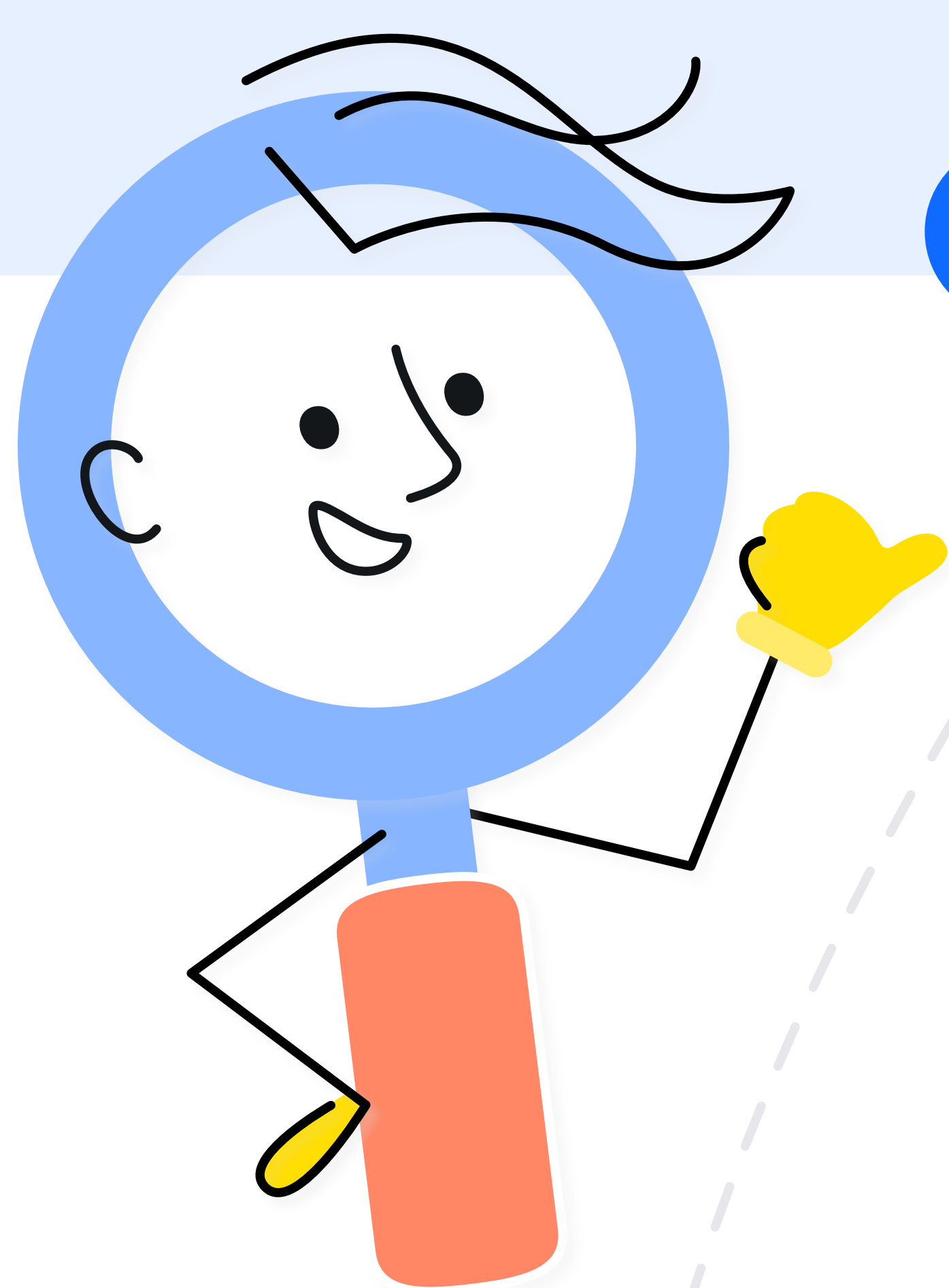


2 Search it.

Open a search engine (like Google Search™) and in great detail type your problem into the search bar. Developers are always helping each other out!

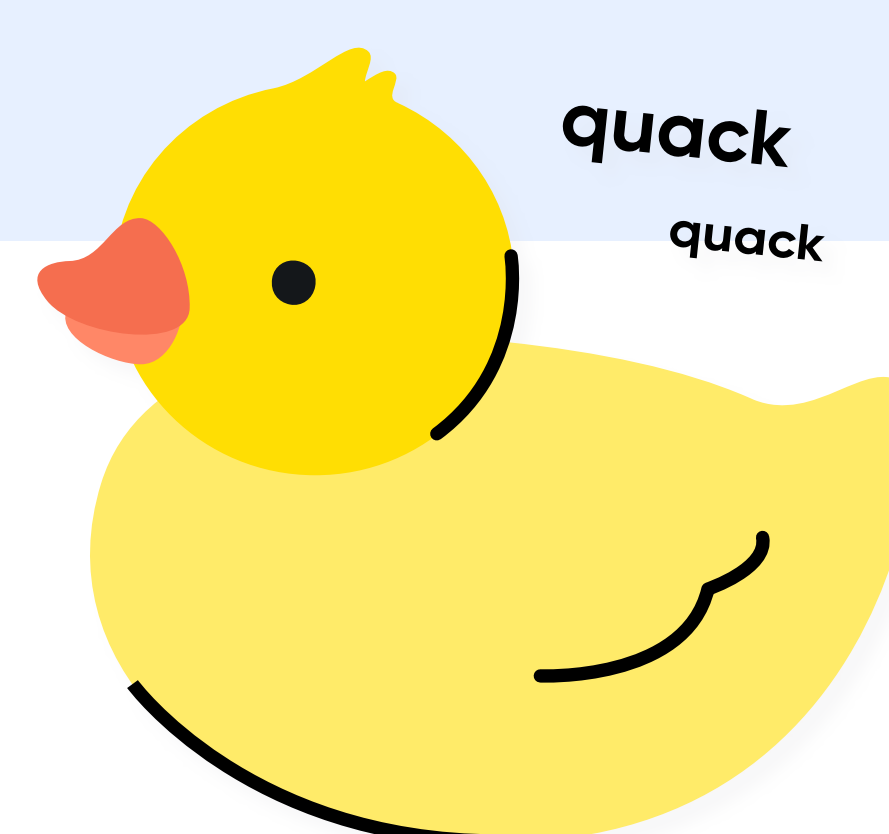
Did you know? Real bugs used to get stuck in computers causing them to crash. Computer scientists named the process of removing the bug “debugging.”

Today this term is used when **an error breaks the code.**



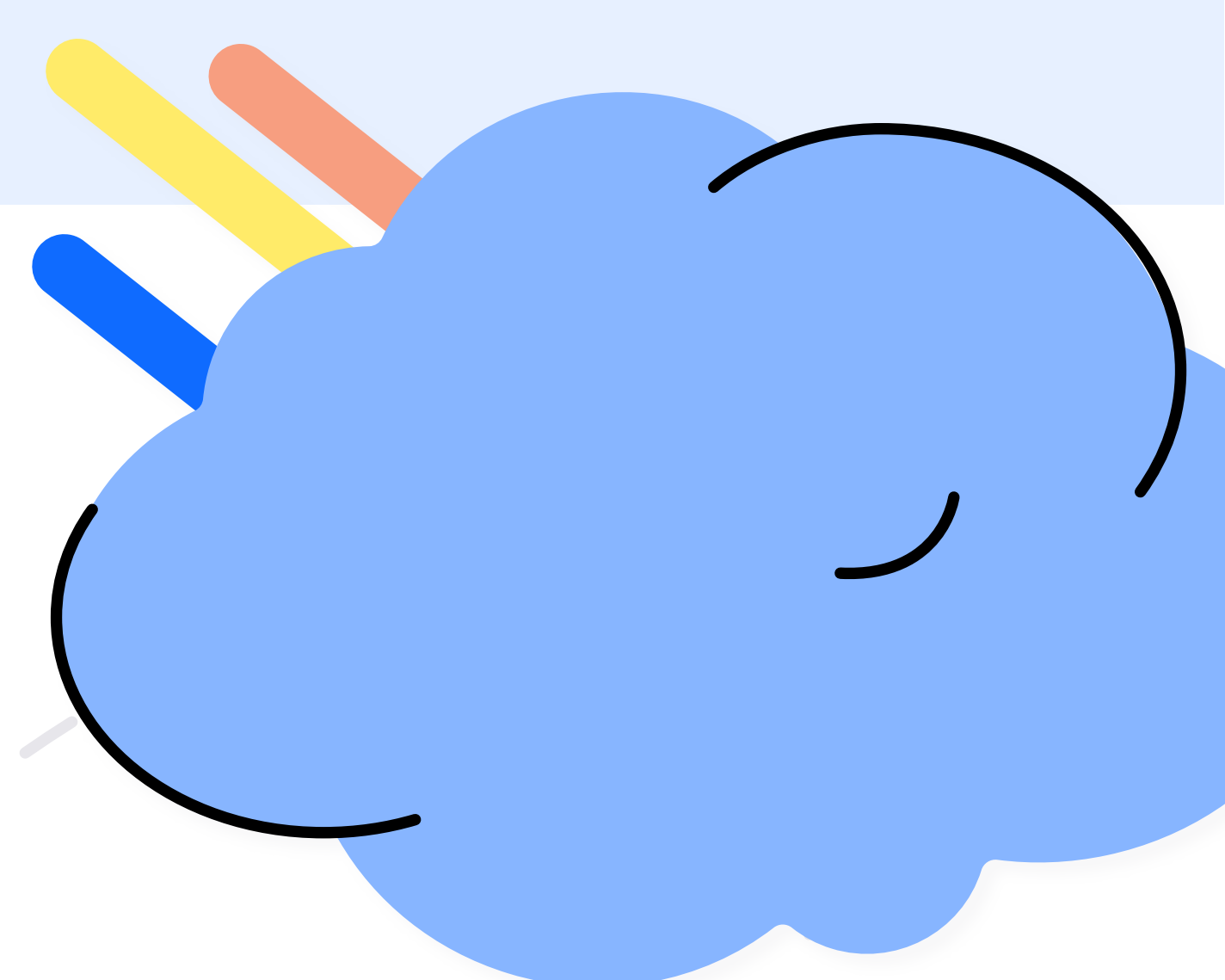
3 Use the Rubber Duck Method.

Explain, out loud, line by line your code and what outcomes you're aiming to accomplish. This approach is likely to expose the bug.



4 Take a break and think about something else.

When debugging is taking a long time, it is important to give your mind a break and focus on something else. The answer may come while taking that break!



5 Search the Answer Keys (Teachers Only 😊)

A Skill Struck teacher can access answer keys for any challenge or activity within Skill Struck. As a teacher, searching the answer key is an efficient way to find the solution you're looking for.

