Kit’s Code-Cracking Guide to Debugging

Don't get stuck—get savvy! Debug like a pro with Kit the Fox.

■ What is a 'bug'? A bug is an unexpected error, flaw, or fault in a computer program that prevents it from running as intended.

■ Why do we debug? Debugging is the methodical process of examining your code to locate the source of an error and fixing it so the algorithm functions correctly.

■ What is a syntax error? These are 'grammatical' mistakes in your code, such as a missing bracket or a misspelt command, which stop the computer from understanding your instructions.

■ How do logic errors differ? A logic error occurs when the code runs without crashing, but the output is incorrect because the sequence of steps is flawed.

■ What is the best strategy for debugging? Break your code into smaller segments and test them individually to isolate exactly where the sequence goes wrong.

Did you know? Did you know? The term 'bug' to describe a computer error became famous in 1947 when Grace Hopper, a pioneering computer scientist, found a literal moth trapped in the Harvard Mark II computer, causing the system to malfunction! She taped the moth into her logbook, and the term 'debugging' was born.

Key vocabulary: Algorithm · Bug · Debugging · Syntax · Logic Error · Sequence · Iteration