

Kit's Code-Cracker Debugging Log

Learning objective: To understand how to identify, predict, and correct errors (bugs) in an algorithm or sequence of instructions.

Kit the fox has found some sneaky bugs in a set of instructions! Use this log to track your debugging journey. First, write down the original steps you were given. Then, identify where the code goes wrong, explain why it happened, and write the corrected, bug-free version.

Word bank: algorithm · bug · debug · sequence · syntax · logic error · predict · test

1. The Original Algorithm: Write out the sequence of steps exactly as they were provided before you started debugging. (2 marks)

2. The Bug Spotter: Where does the sequence stop working correctly? Describe the exact step where the error occurs. (2 marks)

3. The Logic Detective: Why do you think this bug happened? Was it a spelling mistake, a missing step, or an order that didn't make sense? (3 marks)

4. The Solution: Write your new, corrected version of the algorithm below so that it reaches the goal successfully. (3 marks)

5. The Final Test: If you were to run your corrected code again, what outcome would you expect to see? How do you know it is fixed? (2 marks)

Extension challenge: Imagine you are explaining the 'bug' you found to Kit. Write a short note to him explaining how you found the mistake and how you felt when the code finally worked!