**Question 1: Understanding Basic Indentation**

**What is the purpose of indentation in Python?**

Hint: Consider how Python uses indentation to define blocks of code.

**Question 2: Indentation Errors**

**What error do you encounter if you don't properly indent your Python code? Provide an example.**

Hint: Try writing a simple **if** statement without proper indentation to see what type of error Python raises.

**Question 3: Mixing Tabs and Spaces**

**What issue might arise from mixing tabs and spaces for indentation in Python? How can you avoid it?**

Hint: Think about Python's strictness regarding consistency in indentation and the recommended practice for tabs and spaces.

**Question 4: Correcting Indentation**

**Given a block of code with incorrect indentation, how would you correct it? Example code:**

pythonCopy code

def my\_function(): print("Hello, World!")

Hint: Determine where the indentation is required to denote the function body properly.

**Question 5: Nested Blocks**

**How does indentation work with nested blocks, such as nested if statements or loops? Provide an example.**

Hint: Consider how each level of nesting requires its own level of indentation to distinguish different code blocks.

**Question 6: Indentation in Multi-line Statements**

**How do you handle indentation in statements that span multiple lines, such as a long if condition?**

Hint: Explore the use of backslashes (**\**) or parentheses to continue statements across multiple lines while maintaining readability.