Algorithm for the Geometry Calculator

1. **Start**
2. Display the menu with options:
    1. Check if a number is prime
    2. Check if a number is composite
    3. Find prime factors of a number (Fundamental Theorem of Arithmetic)
    4. Apply the Pythagorean Theorem
    5. Exit
3. Ask the user to enter their choice (1, 2, 3, 4, or 5).
4. If the user chooses **1 (Prime Check)**:
    - Ask the user to input a number.
    - Check if the number is prime using the is_prime function.
    - Display the result.
5. If the user chooses **2 (Composite Check)**:
    - Ask the user to input a number.
    - Check if the number is composite using the is_composite function.
    - Display the result.
6. If the user chooses **3 (Prime Factors)**:
    - Ask the user to input a number.
    - Find the prime factors of the number using the prime_factors function.
    - Display the prime factors.
7. If the user chooses **4 (Pythagorean Theorem)**:
    - Ask the user to input two known sides of a right-angled triangle and leave the unknown side as 0.
    - Calculate the missing side using the pythagorean_theorem function.
    - Display the result.
8. If the user chooses **5 (Exit)**:
    - Print "Exiting Geometry Calculator. Goodbye!"
    - **Stop**

9. If the user enters an invalid choice:
    - Print "Invalid choice! Please select a valid option."
10. Repeat from step 2 until the user chooses to exit.