1. The Temperature Converter (Basic Functions)

Goal: Create a program that converts Celsius to Fahrenheit using a dedicated function.

- **Task:** Write a function named CelsiusToFahrenheit that takes a double as a parameter and returns the converted value.
- **Formula:** $F = (C \times 9/5) + 32$
- **Challenge:** Call this function inside Main for three different temperatures (0, 25, and 100) and print the results.

2. The Global vs. Local "Tax" (Scope Awareness)

Goal: Understand how local variables can "shadow" or interact with class-level variables.

- **Task:** Define a class-level (static) variable named taxRate and set it to **0.1** (10%).
- **The Twist:** Create a function CalculateTotal that takes a price. Inside this function, declare a *local* variable also named taxRate set to **0.2** (20%).
- **Challenge:** Calculate the total price using the local variable. Back in Main, print the class-level taxRate to see if it changed.

3. The "Ref" Parameter Swap (Passing by Reference)

Goal: Learn how to modify a variable's value outside its local scope using the ref keyword.

- **Task:** Create a function called DoubleValue that takes an integer.
- **The Logic:** Usually, integers are passed by value (a copy). Use the ref keyword so that when you double the number inside the function, the variable in Main actually changes.
- **Challenge:** Initialize int myNumber = 10;, pass it to the function, and then print myNumber in Main to verify it is now 20.

4. The Username Validator (Logic & Predicates)

Goal: Write a function that returns a boolean based on multiple conditions.

- **Task:** Create a function IsValidUsername that accepts a string.
- **Conditions:**
    1. Length must be between 8 and 15 characters.
    2. Must not contain any spaces.
    3. Must start with an uppercase letter.
- **Challenge:** Use an if statement in Main to print "Access Granted" or "Invalid Entry" based on the function's return value.

5. Area Overloading (Method Overloading)

Goal: Use the same function name for different shapes based on the parameters provided.

- **Task:** Create two functions named GetArea.
    - **Version 1:** Takes one double (side) and returns the area of a square ($side^2$).
    - **Version 2:** Takes two doubles (width, height) and returns the area of a rectangle ($w \times h$).
- **Challenge:** Call GetArea(5) and GetArea(5, 10) in your console and observe how C# knows which one to pick.