**Lab: Getting Started with GitHub Copilot in Visual Studio Community 2022**

**🧰 Prerequisites**

Before starting, make sure you have:

* A **GitHub account** (GitHub Copilot requires an active GitHub subscription or free trial)
* **Visual Studio Community 2022** installed
* An active **Internet connection**

**Step 1: Install the GitHub Copilot Extension for Visual Studio 2022**

1. **Open Visual Studio 2022**
2. Go to **Extensions > Manage Extensions**
3. In the search bar, type **"GitHub Copilot"**
4. Locate the extension titled **GitHub Copilot** (by GitHub)
5. Click **Download**
6. Restart Visual Studio to complete the installation

**Step 2: Sign in to GitHub**

1. Once Visual Studio restarts, go to **View > Other Windows > GitHub Copilot**
2. A **login prompt** will appear (if not, use the **GitHub Copilot** window to sign in)
3. Click **Sign in with GitHub**
4. A browser window will open; authorize Visual Studio to access your GitHub account
5. Follow the prompts and **approve GitHub Copilot** access

**Note**: If you don’t have a subscription, you can start a **free trial** of GitHub Copilot during this process.

**Step 3: Enable Copilot in Your Project**

1. Create or open a project (e.g., Console App in C#)
2. Open a .cs file or any supported language file
3. Start typing a function or comment like:

// Create a function to check if a number is prime

1. Copilot will **suggest code inline**. Press Tab to accept the suggestion, or use Alt + [ / Alt + ] to cycle suggestions.

**Step 4: Customize Copilot Settings (Optional)**

1. Go to **Tools > Options**
2. Navigate to **GitHub Copilot**
3. Here you can:
   * Enable/disable Copilot
   * Set behaviors (inline suggestions, tab completions, etc.)
   * Turn it off per-language if desired

**Step 5: Practice Using Copilot**

Try out the following to explore Copilot's capabilities:

* Type a comment that describes a task (e.g., "// Sort a list of integers in descending order")
* Write a method signature and pause to see Copilot's suggestions
* Try autocompleting loops, data structures, or even test cases

**Example**

Create a simple calculator in C# using GitHub Copilot:

1. Create or open a project (e.g., Console App in C#)
2. Open a .cs file or any supported language file
3. Start typing a function or comment like:

// Create a calculator class with add, subtract, multiply, and divide methods

Press Tab after each comment or method declaration to accept Copilot suggestions.