1. **Select Your Operating System (OS)**:
   * **Choose Windows 11**: It offers the latest security features and support for modern hardware.
   * **Download**: Visit the official [Microsoft Windows 11 download page](https://www.microsoft.com/software-download/windows11).
   * **Install**: Run the downloaded Media Creation Tool and follow the on-screen instructions to upgrade or create installation media.
2. **Install a Text Editor or Integrated Development Environment (IDE)**:
   * **Choose Visual Studio Code (VS Code)**: It’s free, open-source, and supports a wide range of programming languages.
   * **Download**: Go to the [Visual Studio Code download page](https://code.visualstudio.com/Download) and select the Windows version.
   * **Install**: Open the downloaded installer and follow the prompts. Ensure you select ‘Add to PATH’ during installation to access VS Code from the command line.
3. **Set Up Version Control System**:
   * **Install Git**: Download Git from [Git’s official website](https://git-scm.com/download/win) and run the installer. Choose options that best fit your workflow during setup.
   * **Create GitHub Account**: Sign up for a GitHub account at [GitHub](https://github.com/) to host and manage your code repositories.
   * **Initialize Git Repository**: Open your project directory in VS Code, open the terminal (Ctrl+), and run git initto initialize a new Git repository. Add your files withgit add .and make your first commit withgit commit -m “Initial commit”`.
4. **Install Necessary Programming Languages and Runtimes**:
   * **Install Python**: Visit [Python’s official website](http://www.python.org/) and download the latest version for Windows. During installation, check ‘Add Python to PATH’ to use Python from the command line.
   * **Verify Installation**: Open a command prompt and type python --version to ensure Python is installed correctly.
5. **Install Package Managers**:
   * **Python Package Manager (pip)**: It comes pre-installed with Python. Verify by running pip --version in the command prompt.
6. **Configure a Database**:
   * **Download MySQL**: Visit [MySQL Downloads](https://dev.mysql.com/downloads/windows/installer/5.7.html) and select the appropriate installer for your system.
   * **Install MySQL**: Run the installer, choose the setup type (typically ‘Developer Default’), and follow the configuration steps, setting up a root password when prompted.
7. **Set Up Development Environments and Virtualization** (Optional):
   * **Docker**: If your projects require containerization, download Docker Desktop for Windows from [Docker’s official site](https://www.docker.com/products/docker-desktop).
   * **Virtual Machines**: Tools like VirtualBox can be used to create isolated environments for different projects.
8. **Explore Extensions and Plugins**:
   * Within VS Code, click on the Extensions view icon on the Sidebar or press Ctrl+Shift+X.
   * Search for extensions related to your development stack, such as Python, Docker, MySQL, etc., for enhanced functionality like syntax highlighting, linting, debugging, and more.