**INSTRUCTIONS :-**

**Here is a list of possible commands and steps you would use to build and run the Voice Assistant project in Python using Visual Studio Code (VS Code) on Windows:**

**### Steps and Commands to Create the Voice Assistant Project**

**1. \*\*Install Python\*\* (if not already installed):**

**- Download Python from [here](https://www.python.org/downloads/).**

**- During installation, make sure to check the box that says \*\*"Add Python to PATH"\*\*.**

**2. \*\*Install VS Code\*\* (if not already installed):**

**- Download Visual Studio Code from [here](https://code.visualstudio.com/).**

**3. \*\*Open VS Code\*\*:**

**- Open the terminal in VS Code by going to \*\*View\*\* > \*\*Terminal\*\* or pressing `Ctrl + ~`.**

**4. \*\*Create a New Folder for Your Project\*\*:**

**- Open File Explorer, navigate to the desired location, and create a new folder for the project.**

**- In VS Code, click on \*\*File\*\* > \*\*Open Folder\*\* and select the folder you created.**

**5. \*\*Create a New Python File\*\*:**

**- In VS Code, create a new file named `voice\_assistant.py` by right-clicking in the Explorer pane and selecting \*\*New File\*\*.**

**6. \*\*Install Required Python Packages\*\*:**

**In the VS Code terminal, run the following commands to install the necessary libraries:**

**- Install \*\*SpeechRecognition\*\*:**

**```bash**

**pip install SpeechRecognition**

**```**

**- Install \*\*pyttsx3\*\*:**

**```bash**

**pip install pyttsx3**

**```**

**- Install \*\*PyAudio\*\* (optional, required for microphone access):**

**```bash**

**pip install pyaudio**

**```**

**If you encounter errors while installing `pyaudio`, use the following command:**

**```bash**

**pip install pipwin**

**pipwin install pyaudio**

**```**

**7. \*\*Write Your Python Code\*\*:**

**- Paste your Python code into the `voice\_assistant.py` file.**

**8. \*\*Run the Project\*\*:**

**- Save the file (`Ctrl + S`).**

**- In the terminal, run the Python script using:**

**```bash**

**python voice\_assistant.py**

**```**

**9. \*\*Common VS Code Shortcuts\*\*:**

**- \*\*Open Terminal\*\*: `Ctrl + ~`**

**- \*\*Run Python File\*\*: `Ctrl + Shift + P` (then type `Python: Run Python File` or simply use the terminal and type `python <filename>`).**

**- \*\*Open Command Palette\*\*: `Ctrl + Shift + P`**

**- \*\*Save the file\*\*: `Ctrl + S`**

**10. \*\*Debugging\*\*:**

**- You can set breakpoints and debug your Python code using VS Code’s built-in debugging tools. To do this, click to the left of the line number to set a breakpoint, then click the green play button on the \*\*Run\*\* and \*\*Debug\*\* tab.**

**### Voice Assistant Project Commands Overview:**

**- \*\*Install Python Libraries\*\*: Use `pip install <package-name>` for each required package.**

**- \*\*Run the Project\*\*: Use `python voice\_assistant.py` in the terminal.**

**- \*\*Save Your Work\*\*: `Ctrl + S` to save changes.**

**- \*\*Debug Your Code\*\*: Use breakpoints in the \*\*Run\*\* and \*\*Debug\*\* section for debugging.**