**Instructions to Set Up and Run the C Code**

**Prerequisites**

To successfully run the C code, make sure your system has the following installed:

1. **Visual Studio Code (VS Code)**  
   You can download VS Code from the official website:  
   <https://code.visualstudio.com/>
2. **C Compiler (GCC or MinGW)**  
   If you're using Windows, install MinGW or any other C compiler. For other operating systems, GCC should already be available. You can install MinGW from:  
   https://sourceforge.net/projects/mingw/
3. **C/C++ Extension for VS Code**  
   Open VS Code and install the "C/C++" extension by Microsoft from the Extensions marketplace.

**Steps to Run the Code**

**1. Clone or Download the Repository**

* If you're familiar with Git, clone the repository using the following command:

git clone <https://github.com/himanshi-khanduja/Hospital_Management_Project/tree/main>

* Alternatively, you can download the repository as a ZIP file and extract it to your desired location.

**2. Open the Folder in VS Code**

* Launch VS Code and open the folder where you cloned or extracted the repository.
* In VS Code, go to **File > Open Folder** and select the project directory.

**3. Install the C/C++ Compiler (if not installed)**

* If you're on Windows, you may need to add MinGW or GCC to your system's PATH.
* Verify that the compiler is correctly installed by typing the following command in the terminal:

gcc --version

**4. Configure C Compiler in VS Code**

* Ensure that VS Code is configured to use the correct C compiler.
* Open the **Command Palette** (Ctrl + Shift + P), search for "C/C++: Edit Configurations (UI)" and ensure that your compiler path is correctly set.
* If needed, configure the path to gcc or g++ depending on your setup.

**5. Check File Paths**

* If your code references specific file paths for input or output, make sure they are correctly set relative to the project directory.
* You may need to modify any hardcoded file paths within the code to match the structure of your local environment. Look for paths in the code that use absolute references and update them to relative paths where necessary.

**6. Compile and Run the Code**

* Open the integrated terminal in VS Code (use Ctrl + ), and navigate to the folder containing your C source code file (e.g., main.c).
* Compile the code by running the following command:

gcc -o project main.c

* Run the compiled executable using the following command:

./project.c

(On Windows, use output\_filename.exe instead of ./project.c)

**7. Debugging (Optional)**

* If you'd like to debug the code, you can set breakpoints in the source file and run the debugger in VS Code by pressing F5 or selecting **Run > Start Debugging**.
* Ensure you have set up a launch configuration (launch.json) in VS Code if you are debugging for the first time.