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cs499

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The artifact I'm discussing is from Algorithms and Data Structures project2 cs 410. The code includes functions for handling user input, processing data, and displaying information. The main functions are CheckUserPermissionAccess, DisplayInfo, CustomerChoice, and sub\_80484c0. I chose this artifact because it fit this category very well and the improvements included CMake build script for the project in a CMake configuration file called CMakeLists. Set the language standard for the C++ code to use to C++17. Compile and integrate the SQLite library into the project. Database Integration Of which imported the SQLite library `SQLite3.h` was included. Created and destroyed an in-memory SQLite database at the start and end of the levels of user permissions. Permission-based actions like admin Show information, generate table, input, examine table, erase table. User: Show information, build a table, enter the information, change the user's right, show users, check the

table, remove the table. Database Operations ,createTable, insertData, and viewTable. Retrieve records from a particular table of the Views database. Enhanced User Interaction included a switch in the main function to allow several other actions in response to user input. Integrated prompts and input processing of actions on the database. Renamed functions for clarity of expression and comparability. Suppress Warnings function prototypes and code that is no longer needed. Structure for better usability for reading, as well as maintaining the code. Error Handling Implemented the feedback on SQLite. I did meet the course objectives while enhancing and improving it. I learned to choose better algorithms or data structures to optimize performance and memory usage. I learned debuggers as well, logging statements, and test-driven development techniques.