

Introduction to Data Management – HW5: PL/SQL

Team Number: 20

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Problem Statement

The tasks required the ability to fine tune the control of the SQL language. We implemented these tasks using the Procedural Language Extensions to SQL. Using PL/SQL we were able to declare variables, limit the scope of the block, use loops and conditionals, and call external functions. The goal is to manipulate the data we already have into informative data that is not explicitly included in each entry.

Proposed Solution

The tables we worked with in this task are: Location, Feature, Reservation and Customer. We implemented the first task using if-then-else conditionals and exception handling. We checked the functionality of the code by deleting a record, rerunning the code block, and rolling back the change. For the second task, we dynamically accepted user input for customer_id and displayed if the number of reservations was greater than or less than 15. We successfully committed a new customer record into our table for task 3. Using Bulk Collect and a for loop, we were able to display the names in a predefined sorted order for the features starting with the letter 'P'. With the help of Cursor Features and Joins on the Location and Reservation table, we were able to display the features for a city which we dynamically requested the user for. Task 6 was easily handled by making a named procedure 'insert_customer' to insert new Customer records into the table. Finally, by defining a callable function 'hold_count' we were able to find the number of total rooms held under a customer_id.

Assumptions

We assume that the DDL Starter Script was formulated and run successfully before querying the data using SELECT statements.

Conclusion and Next Steps

Next steps would be to explore more functionalities of PL/SQL to help uncover informative insights from the data.