Introduction:

Our system is a database management system for a gaming store that allows customers to purchase games online. The database includes information about the users, games, developers, genres, platforms, and purchases.

ER Diagram:

[INSERT IMAGE]

Explanation of Normal Forms:

Our database follows the normal forms to ensure data integrity and minimize data redundancy. Specifically, it follows the third normal form (3NF), which means that each attribute depends only on the primary key and no other non-key attributes. This minimizes data redundancy and eliminates data anomalies, such as update anomalies, insertion anomalies, and deletion anomalies.

Item 1: Procedure which does group by information

This procedure groups the purchases by game title and returns the total number of purchases and the total revenue for each game.

1.This code is a procedure that calculates the number of purchases and revenue from sales of video games from two tables: purchases and games.

2.This code creates a PL/SQL function that takes the name of a table and returns the number of records in that table. To do this, a dynamic SQL query is used - it is formed dynamically based on the passed table name and executed using the EXECUTE IMMEDIATE command.

3.This procedure updates the price of the game in the "games" table by the specified game ID and outputs the number of updated rows to the standard DBMS output.

4.It checks that the name of the game contains at least 5 characters, and if this is not the case, an exception is generated. Otherwise, a new game is added to the table.

5.every time before inserting a new entry into the "games" table, a message about the number of rows in the table at the moment will be displayed on the screen.

Conclusion:

Our database management system for a gaming store is designed to store information about users, games, developers, genres, platforms, and purchases. It follows the third normal form (3NF) to ensure data integrity and minimize data redundancy. We have added a procedure which groups purchases by game title, a function which counts the number of records in a table, a procedure which uses SQL%ROWCOUNT to determine the number of rows affected, a user-defined exception