

**Santa Clara University**  
Department of Computer Engineering  
Advanced Database Systems (COEN 380)

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Project #1 (Individual) Preview

**Project Overview:**

Each student will create an RDBMS personal development environment, e.g., using their own laptop or an alternative. The purpose of this project is to demonstrate your ability to set up the RDBMS environment and creating very simple schema (one or two tables and exercise select and IUD (Insert/Update/Delete) operations on the database in both interactive mode as well as using JDBC successfully.

1. Select you favorite RDBMS; ensure that it supports JDBC
2. Download and install both the RDBMS and JDBC driver
3. Create a Database with a schema (example, sales transactions) that consists of one table. Make sure that you have a PK (one column – customer-id) in that table.
4. Populate the table (Insert SQL statements) with many entries representing sales transactions
5. Query the table with different flavors of SELECT statement including Join, Aggregate functions, ORDER BY, GROUP BY, etc.
6. Submit a report that lists:
  - a. Database used
  - b. JDBC driver (type-4)
  - c. The table schema definition

- d. List the content of the table after population;  
`SELECT * from Table;`
- e. List of Queries demonstrating the different functions you tested:  
Aggregate, Order By, Group By, etc. and follow-up with each query with a copy of the result.