# Assignment 9 – Advanced SQL

We created some reports a few weeks ago. Since then, we have learned more advanced SQL for queries. We will practice those techniques in this assignment.

Part 1 – create two grouped queries

Determine two queries that make sense in groups. For example – grouping students by major to get average GPA. Create a view for each query. Confirm the results are correct.

Part 2 – create a temp table

Use INSERT INTO to populate a temporary table from one of your views. Write a query that performs further processing on the temp table.

Part 3 – MERGE

Write a merge statement to update or insert a record in one of your tables.

Part 4 – CTE – Write a query that uses a CTE (common table expression) to simplify the query. Create a view of the query.

Part 5 – Dates – if you don’t have dates on one of your tables, either make a table with dates and populate it with data OR add a column of dateCreated to one of your existing tables and populate it.

Write a query that uses dates and create a view for it. This could be combined with part 4.

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| Rubric | Poor | OK | Good | Great |
| Two Grouped Queries 1 | Not done (0) | Grouping doesn’t exist OR is wrong (3) | Grouping is good, not in a view (7) | View and grouping correct (10) |
| Two Grouped Queries 2 | Not done (0) | Grouping doesn’t exist OR is wrong (3) | Grouping is good, not in a view (7) | View and grouping correct (10) |
| Create a temp table | Not done (0) | INSERT INTO attempted (7) | INSERT INTO correct (13) | INSERT INTO and query correct (20) |
| Merge | Not done (0) |  | Merge inserts or updates (10) | Merge inserts and updates (20) |
| Dates | Not done (0) |  | Table created/updated(10) | Query/View correct (20) |