## **Conceptual Questions:**

#### Difference between WHERE and HAVING?

- 1. Both are used as filters but HAVING applies to groups and filters on aggregate functions, but WHERE applies to individual rows.
- 2. WHERE cannot filter by aggregate functions; however, HAVING can.
- 3. WHERE can be used with Select, Update, Delete, but HAVING can only be used with Select.

# Difference between RANK() and DenseRank()?

They both gives us the ranking within ordered partition, but for identical values, Rank() skips the next available ranking values while DenseRank() still uses the next chronological ranking value, ranks here are consecutive.

## What is correlated subquery?

A correlated subquery is a subquery that uses the values of the outer query. The correlated subquery depends on the outer query for its values.

#### Criteria of Union and Union all?

There must be same number of columns and same data type associated with column number for the two result sets to be combined. Also, they use first select statement alias.

#### Difference between UNION and UNION ALL?

Union all keeps duplicates, but Union removes duplicates because it applies distinct. Also, Union the records from the first column is sorted automatically but Union All doesn't. And Unions cannot be used in recursive CTE, while Union All can.

#### Difference between Union and JOIN

Union is used to combine different results sets vertically while Join combine data into new columns which is horizontally.

### Queries are in the GitHub repo under HW2.