5-2 Milestone four: Databases

The artifact that I have taken is SQL queries document written for the final project of “DAD 220: Introduction to SQL” course. The artifact has queries covering all the data operations such as data definition and modification operations – create, insert, delete and update. MySQL was used to execute the queries as part of course. The final project has covered basic operations of MySQL well but it can be expanded to include advance and complex SQL queries such as ALTER, COUNT, INNER JOIN, LEFT JOIN and RIGHT JOIN.

Joins help retrieving data from two or more database tables. The tables are mutually related using primary and foreign keys. There are multiple join types and Cross Join is the simplest among all. The inner JOIN is used to return rows from both tables that satisfy the given condition. The LEFT JOIN returns all the rows from the table on the left even if no matching rows have been found in the table on the right. RIGHT JOIN is obviously the opposite of LEFT JOIN. The RIGHT JOIN returns all the columns from the table on the right even if no matching rows have been found in the table on the left. Where no matches have been found in the table on the left, NULL is returned. ALTER is an advanced SQL statement used to add or drop column of a table, change the column type or data type and change table name etc.

I have re-written the query using ALIAS, ALTER, COUNT, INNER JOIN, LEFT JOIN and RIGHT JOIN which helped to advance my SQL knowledge and refresh the skills. I was having knowledge of Oracle / SQL and My SQL is very similar to it. My skills are advanced by working on this assignment especially with join condition, on how to join two or more databases and tables. The challenging part was getting access to previous course lab from virtual machines. Unfortunately, it is not available hence proceeded with verifying the SQL statements syntax online.