BIT2008A/ITEC2000A: Multimedia Data Management
Fall 2022

Lab 2

1. SQL Basic Queries

1) Create two tables with names emp for employees and dept for departments.
   - dept(deptno, dname)
   - emp(eid, ename, salary, deptno)

   Discuss what datatype to choose for each attribute.
2) You are provided with *dept_data.sql* and *emp_data.sql* scripts. Populate your tables using those files.
3) Write a script to show all the rows in *emp* table.
4) Write a script to show 5 of the employees who get more than 100 as their salary.
5) Create another table for projects:
   - prj(pid, pname)

   Projects and employees have a many-to-many relationship. We want to keep track of employees who have an active role in projects using an intermediate table named *prjmember*. What should the schema of the such table look like?
6) Insert these projects into *prj*:
   - Project 'A' having employees 'manager', 'b', and 'o' involved.
   - Project 'B' having employees 'a', 'b', 'c', and 'd' involved.
   - Project 'C' having employees 'a', and, 'f' involved.
   - Project 'D' having employees 'manager', 'f', 'h', 'i', and 'g' involved.
7) Change the name of project 'D' to 'E'.
8) Write a script to show a list of employee names with their department name.
9) Write a script to show a list of employee names who work in 'sales' or 'inventory' departments.
10) Write a script to show a list of department names without any employees.
11) Write a script to show the name, salary, and department number of the employees with the highest earnings in each department.
12) Write a script to show a list of project names with fewer than 4 employees involved.
13) Write a script to show the summation of salaries for the employees involved in project 'B'.
14) Write a script to show a list of project names with the average salary of the employees involved in them.