Practical C7 – Grouped Query

Objectives of this practical

- Learn to provide summary (aggregate functions) based on specific attributes (Group By)
- Learn to differentiate specification of individual rows or groups for output (Where/ Having)

ST1501 Data Engineering

 (a) Write the SQL statement to list the mean pay, total pay and the number of staff in each department. Include only full-time staff. Sort the result in ascending order of the number of staff.

- (b) Include only the department with more than 2 staff.
- 2. (a) Write the SQL statement to list the mean pay, total pay and the number of staff by grade. Include only full-time staff. Sort the result in ascending order of the number of staff.
 - (b) Include only the grade with more than 2 staff.
- 3. Write the SQL statement to list the highest and lowest pay and highest and lowest allowance of each department in ascending order of department code.
- 4. Write the SQL statement to verify that staff names in the staff relation are unique. You should display any staff names that are not unique.
- 5. (a) Write the SQL statement to compute the total manpower cost by department, displayed n descending. Exclude the cost due to Principal and Deputy Principal's Office (PO and DPO) by the using the IN set membership operator. Total manpower cost is computed a sum(isnull(pay,0) + isnull(allowance,0)). List the No of Staff for each department as well.
 - (b) Exclude those departments with one or two staff.
 - (c) Exclude those departments with one or two staff and total manpower cost less than \$20,000.
- 6. Write the SQL statement to list first alphabet of staff number, number of staff and mean age of staff ordered by descending order of number of staff.