CSE311L Database Systems Lab

Total Mark: 30, Total Time: 40 Minutes

All questions carry equal marks.

1. Find all the possible combinations of Postal Code and Department Name. Sort the result set by Postal Code in ascending order.

   N.B: First few rows are provided as sample output.

Postal_Code ▲ 1	Department_Name
26192	Administration
26192	Contracting
26192	Executive
26192	IT
26192	Marketing
26192	Accounting
26192	Sales
26192	Shipping
98199	Accounting
98199	Sales

2. Find the Job ID and positive difference between Average Salary and Midrange Salary for each Job ID. Rename the column as 'Difference'. Round the Difference to zero decimal places.

   Midrange:The mean of the highest and lowest values. $(Max + Min) / 2$.

Job_id	Difference
AC_ACCOUNT	1700
AC_MGR	100
AD_ASST	100
AD_PRES	6000
AD_VP	5500
IT_PROG	600
MK_MAN	1000
MK_REP	500
SA_MAN	6300
SA_REP	2000
ST_CLERK	575
ST_MAN	1200

3. Return all the employees' First Name concatenated with Last Name separated by a comma and space, and the Department Names in a single list. Only consider the Last Name of the employees that ends with **S**, and the Department Name that has a **N** in their second last index. Rename the column as 'List of Employees and Department'. Sort the list in lexicographical order.

List of Employees and Department
Accounting
Contracting
Curtis, Davies
Kevin, Mourgos
Marketing
Peter, Vargas
Randall, Matos
Shelley, Higgins
Shipping
Treena, Rajs

4. Display the Last Name and department ID of all employees in departments between 20 and 50 in descending order by department ID and in alphabetical order by Last Name.

Last_name ▲ 2	department_id ▼ 1
Davies	50
Matos	50
Mourgos	50
Rajs	50
Vargas	50
Fay	20
Hartstein	20

5. Display the Last name and the Street Address of their department for every employee who was hired in May in any year. Return the employee's last name also despite the presence of Street Address.

LAST_name	Street_Address
Ernst	2014 Jabberwocky Rd
Abel	Magdalen Centre- The Oxford Sc. Park
Grant	NULL