**COMP 3610 : Database Systems**

**Activity#2 (Marked)**

**Max marks : 20**

**Due by : 19th January 2023 11:59 PM**

Use your Oracle USER ID stuxx/userxxxx on BTACS database.

1. Use the SQL Developer to login into your account
2. Create the following tables : (xx is your login number)

staffxx (**staffNo char(5)**, lname, fname, dept, desig, joiningDate, salary, rating char(1), ***branchCode***)

branchxx (**branchCode char(5)**, address, city, phone, yearOfOpening number(4))

Please note the code for rating as CHAR(1) with the values as ‘1’, ‘2’ or ‘3’ as:

1 = Full time employee

2 = Contract employee

3 = Visiting employee

\*\* please note that branchCode is foreign key and works as primary key in branch table. So the data will go in branch table first before branchcode goes in staff table.

1. Insert 5 rows in the new table branchxx and then total 10 rows in staffxx
2. List both the tables
3. Now, Alter the staff table to add DOB, commission and gross salary fields

1. Write the queries to: (2 marks each)
   1. List all the full time employees
   2. List the names of the employees who are managers (fname + lname)
   3. List the names of all employees who joined in last year
   4. List all the manager based on decreasing order of their salary
   5. Calculate the commission as 5% for managers and 4% for others
   6. Calculate gross salary as sum of salary and commission
   7. Display the estimated retirement date of every employee (based on the retirement age of 65, it should be the last day of that month)

Tip: (last\_day(add\_months(sysdate, 12))

* 1. Display all employees whose ages are greater than 50
  2. Display the employees based on ages (i.e. eldest on top)
  3. List the branches from the oldest to the newest branch.

Ref: <https://docs.oracle.com/cd/E17952_01/mysql-5.6-en/date-and-time-functions.html>

<https://docs.oracle.com/cd/E17952_01/mysql-5.6-en/string-functions.html>

To submit: - need to submit 2 files

* pdf – contains the commands for Q5 followed by screen shot showing the result
* Text - .sql - copy all the commands from the developer in it and save it as .sql (all commands from Q1 till Q5 (j))

**Please save the file as .pdf and submit it on moodle with the .sql file**