\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

::ASSIGNMENT #1:: PART A

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Create a collection with name as EMP\_XXX. XXX are the last three characters from your userid.

Inside the collection create the following Employee table. Insert the data inside it.

>> Note: Employees is the work tables for these queries

Table: Employees (EmployeeID, First\_Name, Last\_Name, Dept\_Code, Hire\_Date, Credit\_Limit, Phone\_Ext, Manager\_id)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Employee First\_Name Last\_Name Dept Hire\_Date Credit Phone Manager\_id

Id Code Limit Ext

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

201 Susan Brown Exe 01-Jun-1998 $30.00 3484 (null)

202 Jim Kern Sal 16-Aug-1999 $25.00 8722 201

203 Martha Woods Shp 02-Feb-2004 $25.00 7591 201

204 Ellen Owens Sal 01-Jul-2003 $15.00 6830 202

205 Henry Perkins Sal 01-Mar-2000 $25.00 5286 202

206 Carol Rose Act null null null (null)

207 Dan Smith Shp 01-Dec-2004 $25.00 2259 203

208 Fred Campbell Shp 01-Apr-2003 $30.00 1752 203

209 Paula Jacobs Mkt 17-Mar-1999 $15.00 3357 201

210 Nancy Hoffman Sal 16-Feb-2004 $25.00 2974 203

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

>> Write the query for the following tasks [2 marks each]:

#1. List the following columns of the Employees table in this order:

first name, last name, hire\_date, phone\_ext and department code

Change the name of the hire\_date column to Date\_of\_Joining within the result table. List the employees from the Sales and Marketing department only.

Sort the rows of the result table by the last\_name column in descending order.

-----

SQL QUery:

**SELECT FIRST\_NAME, LAST\_NAME, HIRE\_DATE AS DATE\_OF\_JOINING, PHONE\_CODE, DEPARTMENT FROM EMPLOYEES WHERE DEPARTMENT='Sal' OR DEPARTMENT ='Mkt' ORDER BY LAST\_NAME DESC**

#2. Write a SQL statement to add a new employee Rick Adam to the Employees table. Rick joined the Accounting department.

His date of joining is 18th Sept, 2011. He works for manager with id: 203. He is allotted any phone extension - 3757.

His credit limit is set to $35.00

-----

SQL QUery:

**INSERT INTO EMP\_B18/EMPLOYEES VALUES('211', 'Rick', 'Adam', 'Act', '09/18/2011', 35, 3757, '203')**

#3. List the employees that have a phone number starting with 7 or whose names are starting with letter - 'N'.

Show the employee\_id, first\_name, last\_name and phone\_ext. Sort the rows by employee\_id.

SQL QUery:

**SELECT EMPLOYEE\_ID, FIRST\_NAME, LAST\_NAME, PHONE\_CODE FROM EMPLOYEES WHERE PHONE\_CODE LIKE '7%' OR FIRST\_NAME LIKE 'N%' ORDER BY EMPLOYEE\_ID**

#4. Using the Employees table, list the following columns:

dept\_code, credit\_limit, last\_name, first\_name

Place the columns in that order. Sort the rows by :

dept\_code in ascending order

credit\_limit in descending order

last\_name in ascending order.

And get only those employees who are having credit limits between 20 and 40.

Sql Query:

**SELECT DEPARTMENT,CREDIT,LAST\_NAME,FIRST\_NAME FROM EMPLOYEES**

**WHERE CREDIT BETWEEN 20 AND 40**

**ORDER BY CREDIT DESC, LAST\_NAME ASC**

--------------------------------------------------------------------------------------------

#5. From the Employees table, list the employee\_id, first\_name, last\_name and credit\_limit columns for employees

with the first names: Martha, Carol, Nancy

Sort the rows by the last name.

------

SQl Query:

**SELECT EMPLOYEE\_ID,FIRST\_NAME,LAST\_NAME,CREDIT**

**FROM EMPLOYEES**

**WHERE FIRST\_NAME='MARTHA'OR FIRST\_NAME= 'CAROL'**

**OR FIRST\_NAME='NANCY' ORDER BY LAST\_NAME**

--------------------------------------------------------------------------------------------

#6. From the Employees table, get the department and credit limits for the employees 'Jim Kern'.

------

SQl Query:

**SELECT DEPARTMENT , CREDIT FROM EMPLOYEES WHERE**

**FIRST\_NAME ='JIM'AND LAST\_NAME = 'KERN'**

--------------------------------------------------------------------------------------------

#7. List the department and phone extension for all the employees who don't have a manager.

Sort the rows by the employee\_id.

Sql Query:

**SELECT DEPARTMENT, PHONE\_CODE FROM EMPLOYEES**

**WHERE MANAGE\_ID =' '**

**ORDER BY EMPLOYEE\_ID**

--------------------------------------------------------------------------------------------

#8. Write a query to display distinct department codes credit\_limits.

----

SQl Query:

**SELECT DISTINCT DEPARTMENT, CREDIT FROM EMPLOYEES**

--------------------------------------------------------------------------------------------

#9. Delete all the employees who work for Shipping Department or who have manager\_id null.

----

SQl Query:

**DELETE FROM EMPLOYEES**

**WHERE DEPARTMENT = 'SHP' OR MANAGE\_ID = ' '**

--------------------------------------------------------------------------------------------

#10. Increase the credit limits of all the employees by $15.00 who work for Accounting department.

----

SQl Query:

**UPDATE EMPLOYEES SET CREDIT = CREDIT+15 WHERE DEPARTMENT ='ACT'**

===========================================================================================

:: PART B::

Total Marks : 20

>> Note: Employees is work tables for these queries

Table: Employees

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Employee First\_Name Last\_Name Dept Hire\_Date Credit Phone Manager\_id

Id Code Limit Ext

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

201 Susan Brown Exe 01-Jun-1998 $30.00 3484 (null)

202 Jim Kern Sal 16-Aug-1999 $25.00 8722 201

203 Martha Woods Shp 02-Feb-2004 $25.00 7591 201

204 Ellen Owens Sal 01-Jul-2003 $15.00 6830 202

205 Henry Perkins Sal 01-Mar-2000 $25.00 5286 202

206 Carol Rose Act null null null (null)

207 Dan Smith Shp 01-Dec-2004 $25.00 2259 203

208 Fred Campbell Shp 01-Apr-2003 $30.00 1752 203

209 Paula Jacobs Mkt 17-Mar-1999 $15.00 3357 201

210 Nancy Hoffman Sal 16-Feb-2004 $25.00 2974 203

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Create the following table in the collection you created in Part A, and insert data in it.

Table: Departments

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Dept Name Location

Code

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Act Accounting Toronto

Exe Executive Montreal

Mkt Marketing Vancouer

Per Personnel Ottawa

Sal Sales New York

Shp Shipping Chicago

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

>> Write the query for the following tasks:

--------------------------------------------------------------------------------------------

Task#1:

Consider the above two tables. write a query to set up the Referential Integrity

between these two tables. Also explain what is pre-requisite for setting up the RI between these two tables.[5 marks] >> Ans:

**ALTER TABLE DEPARTMENTS**

**ADD CONSTRAINT DEPARTMENT\_PK**

**PRIMARY KEY (DEPARTMENT)**

**ALTER TABLE DEPARTMENTS**

**ADD CONSTRAINT DEPARTMENT\_PK**

**PRIMARY KEY (DEPARTMENT)**

--------------------------------------------------------------------------------------------

Task#2:

For each employee show the employee\_id, first\_name, last\_name, dept\_code and the department name and location.

Sort the rows by the employee\_id. Show only the employee with ids between 203 and 207.[3 marks]

>> Sql Query:

**SELECT E.EMPLOYEE\_ID, E.FIRST\_NAME, E.LAST\_NAME, E.DEPARTMENT,**

**D.NAME, D.LOCATION**

**FROM EMPLOYEES E,DEPARTMENTS D**

**WHERE E.DEPARTMENT = D.DEPARTMENT**

**AND E.EMPLOYEE\_ID BETWEEN '203' AND '207'**

**ORDER BY E.EMPLOYEE\_ID**

--------------------------------------------------------------------------------------------

Task#3: Consider the above tables for performing the following: [3 marks each]

(A) : Inner Join on dept\_code. Display employee name from the employees table and department name from Department table. >> Sql Query:

**SELECT E.FIRST\_NAME, E.LAST\_NAME,**

**D.NAME**

**FROM EMPLOYEES E**

**INNER JOIN DEPARTMENTS D**

**ON E.DEPARTMENT = D.DEPARTMENT**

---------------

(B) : Left Outer Join on dept\_code. Display employee name from the employees table and department name from Department table. >> Sql Query:

**SELECT E.FIRST\_NAME, E.LAST\_NAME,**

**D.NAME**

**FROM EMPLOYEES E**

**LEFT OUTER JOIN DEPARTMENTS D**

**ON E.DEPARTMENT = D.DEPARTMENT**

-------------

(C) : Right Outer Join on dept\_code. Display employee name from the employees table and department name from Department table. >> Sql Query:

**SELECT E.FIRST\_NAME, E.LAST\_NAME,**

**D.NAME**

**FROM EMPLOYEES E**

**RIGHT OUTER JOIN DEPARTMENTS D**

**ON E.DEPARTMENT = D.DEPARTMENT**

-------------

(D) : Full Outer Join on dept\_code. Display employee name from the employees table and department name from Department table.

>> Sql Query:

**SELECT E.FIRST\_NAME, E.LAST\_NAME,**

**D.NAME**

**FROM EMPLOYEES E**

**FULL OUTER JOIN DEPARTMENTS D**

**ON E.DEPARTMENT = D.DEPARTMENT**

=================================== END - Assignment # 1===================================