**CS-ELEC4C PROJECT REQUIREMENTS:**

**I. Stored Procedure:**

1. Create a stored procedure in Oracle PL/SQL that will map **all** granular information for each parent nodes (regardless of level) under TIME Dimension as provided in the data set. Analogously, your own algorithm should be similar to, but **should not** use, CONNECT BY PRIOR functionality (do your own research here).
2. The full mapping should be stored in a separate database table. This table should be dropped and recreated every time the procedure is executed.

**II. Aggregation**

1. Using the other provided tables, create a DELIVERIES\_FACT table that would integrate all dimensions and measures tables with the granular mapping of TIME dimension.
2. Be ready to provide aggregate answers and its corresponding SQL statement to selected questions that will be provided separately.

*Sample questions:*

1. *How many units of Product A was sold in Location B during periods January-March 2015?*
2. *What is the total profit (in $) gained by selling Product A in Location A versus Location B during first half of 2015?*

Work in groups of **10 members max**. You will just be required to submit the following:

1. Printed answers to questions provided.
2. Printed code for your stored procedure and SQL statements.
3. Export files of all tables in your database.

Format for printed document shall be provided later.

**SUBMISSION: May 12, 2018**

**--LETTER a----------**

**create table oss\_time\_dim\_temp as**

**(**

**select time\_key, time\_level, parent\_id, time\_desc**

**from oss\_time\_dim\_0**

**NATURAL JOIN oss\_time\_dim\_1**

**NATURAL JOIN OSS\_TIME\_DIM\_2**

**NATURAL JOIN 0SS\_TIME\_DIM\_3**

**)**

**create table DELIVERIES\_FACT AS**

**(**

**SELECT DEL.ROW\_ID, DEL.ORDER\_ID, DEL.ORDER\_DATE, DEL.SHIP\_DATE, LOC.LOCATION\_ID, DEL.CITY AS LOCATION, PROD.PRODUCT\_ID, DEL.PRODUCT\_NAME, DEL.SALES, DEL.QUANTITY, DEL.DISCOUNT,DEL.PROFIT, OTD.TIME\_ID, OTD.TIME\_KEY, OTD.TIME\_LEVEL, OTD.INT\_PARENT\_ID, OTD.PARENT\_ID, OTD.TIME\_DESC**

**FROM DELIVERIES DEL**

**JOIN OSS\_TIME\_DIM\_TEMP OTD**

**ON**

**DEL.ORDERDATE = OTD.TIME\_DESC**

**JOIN PRODUCT PROD**

**ON**

**DEL.PRODUCT\_NAME = PROD.PRODUCT\_NAME**

**JOIN LOCATION LOC**

**ON**

**DEL.CITY = LOC.LOCATION\_NAME**

**);**

**----number 1 try LANG---------------**

**SELECT PRODUCT, LOCATION, ORDER\_DATE AS DATE**

**FROM DELIVERIES\_FACT**

**WHERE ((DATE LIKE '1/%' OR DATE LIKE '2/%' OR DATE LIKE '3/%') AND (DATE LIKE '%2015))**

**-----number 1 TRULALU-------**

**SELECT PRODUCT, COUNT(PRODUCT) AS UNITS, LOCATION, ORDER\_DATE AS DATE**

**FROM DELIVERIES\_FACT**

**WHERE ((DATE LIKE '1/%' OR DATE LIKE '2/%' OR DATE LIKE '3/%') AND (DATE LIKE '%2015))**

**GROUP BY LOCATION**

**-----NUMBER 2------------**

**SELECT PRODUCT, SUM(PROFIT), LOCATION, DATE**

**FROM DELIVERIES\_FACT**

**WHERE ((DATE LIKE '1/%' OR DATE LIKE '2/%' OR DATE LIKE '3/%'**

**OR DATE LIKE '4/%' OR DATE LIKE '5/%' OR DATE LIKE '6/%'**

**) AND (DATE LIKE '%2015))**

**GROUP BY LOCATION**