**Task:** **Row Number, Rank, Dense Rank, Duplicates, PIVOT, NULLS**

Create a table containing student scores in your local SQL server.

Use the script in the end for table creation:

**Q1- You have to write a single query which adds the following columns to the existing table (You don't necessarily have to alter the table, you can just display those columns in the select statement.)**

Task 1: REGISTRATION\_NUM: A general registration/roll number. It will be unique for each student in the university.

Task 2: DISCIPLINE\_ROLL: A roll number based on your discipline. This will be unique for each student in a certain discipline.

Task 3: UNI\_POSITION: A number displaying where a student ranks in the whole university. (Students having same score will be ranked together. No position shall be skipped)

Task 4: DISCIPLINE\_POSITION: A number displaying where a student ranks in their respective discipline. (Students having same score will be ranked together. No position shall be skipped)

Task 5: UNI\_POSITION\_UNIQUE: A number displaying where a student ranks in the whole university. (Students having same score will be ranked together. If 2 students share a same position, the next position will be skipped)

CREATE TABLE StudentScore ( Student\_Name NVARCHAR (50),

Student\_Discipline NVARCHAR(50),

Student\_Score INT )

GO

INSERT INTO StudentScore VALUES ('Arya','Engineering', 978)

INSERT INTO StudentScore VALUES ('Tywin','Engineering', 770)

INSERT INTO StudentScore VALUES ('Robert','Management', 1140)

INSERT INTO StudentScore VALUES ('Margaery','Management', 770)

INSERT INTO StudentScore VALUES ('Stanley','Humanities', 1240)

INSERT INTO StudentScore VALUES ('Melisandre','Management', 1140)

INSERT INTO StudentScore VALUES ('Rick','Engineering', 885)

INSERT INTO StudentScore VALUES ('Jon','Engineering', 765)

INSERT INTO StudentScore VALUES ('Ned','Management', 1080)

INSERT INTO StudentScore VALUES ('Daenerys','Management', 770)

INSERT INTO StudentScore VALUES ('Tyrion','Humanities', 912)

INSERT INTO StudentScore VALUES ('Jorah','Management', 1205)

INSERT INTO StudentScore VALUES ('Sansa','Engineering', 890)

Q2:

Please find the attached SQL script (Vitals Table.sql) to generate the PF\_Vitals table in your local database.

The table contains columns named ID, Vital, Date, and Value.

Your task is to reshape the data in such a way that there's one column for each type of vital. You also have to make sure to exclude any entries where the vital is NULL.

The final shape of your data will be something like this:

Patient\_ID  Weight  Height  Pulse  Date

Q3:

Please import the ‘Task Day 2 Q3.sql’ into the database we created for the last task.

You will be needing to use RowNumber, Partition and Group By statements along with subqueries for this task.

You need to write queries to get the following results:

A - Find out any patients which are duplicate on the basis of firstname, lastname and date of birth. Only display the duplicated records.

B - Find out how many patients live in a certain city for all cities. Result output should be like (City,Count)

C - Create an ID against patients uniquely using Select statement.

D - Create an ID which allots the same ID to people with different LastName but increases for patients with the same LastName.