Institución Universitaria	**INGENIERÍA DE SISTEMAS**	2016-1 Versión: 00

ASIGNATURA: Administración de bases de datos Avanzada	**VALOR: 10%**
DOCENTE: Andres Martinez Gutierrez	**FECHA: November 18th 2017**

ASSIGNMENT 1

Submission date: Sunday, November 18th 23:59

1. The product owner has requested a couple of changes of your original design, the first one is they want to implement some kind of historical data for vehicles, it means they want to have the ability to track when a vehicle comes in / out, for example:
   The vehicle 1 was sold on 10/5/2017 and is associated to the bill xxx, the vehicle 10 was received as part of a negotiation associated to xxx bill, the vehicle 100 is new and arrived to be sold and has no bills associated.
   Also they ask for a column which ONLY accepts values: "NEW", "TRADE", "SOLD". **(0.5)**

2. The second change is to handle some sort of inventory for accessories, the table where you store those objects should have a column "units_available" or "unidades_disponibles" (if you made the diagram in spanish). The default value for that column is 30 **(0.5)**

3. Create a view in order to display those products which are under 5 units availables, the view should have the id, the name of the product, code and the name of the manufacturer. **(0.5)**

4. Create a trigger which decreases the number of units available after the product has been associated to one bill. **(0.5)**

5. Create a procedure called "reorder_units", inside the procedure you should call the view created in the step #3, for each element returned, the value of "units_available" should be increased in 20 units by default. **(0.5)**

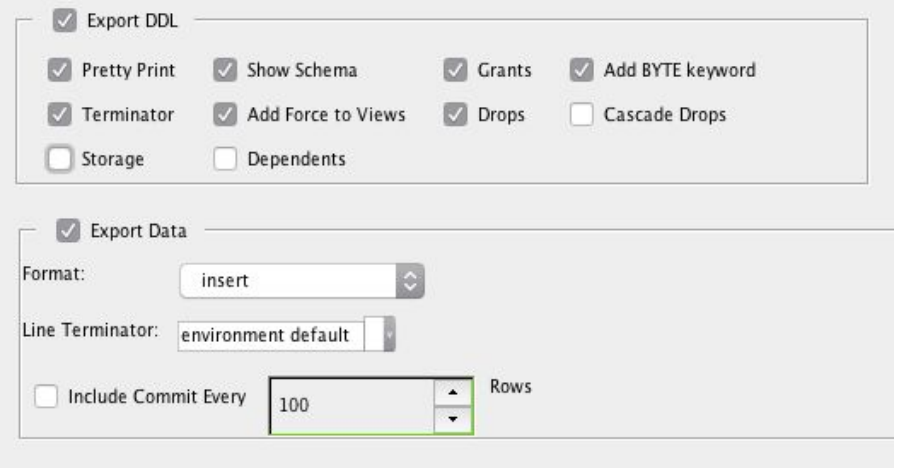
6. Create a view with the following columns (bill_id, sales_person_id, name_of_salesperson, client_id, name_of_client, vehicle_id, brand_of_vehicle, manufacturer_of_vehicle, accesory_id, name_of_accesory). The idea is you can add outside the view 'where bill_id = xx' and displays the information associated to a bill including its details (accessories). **(0.5)**

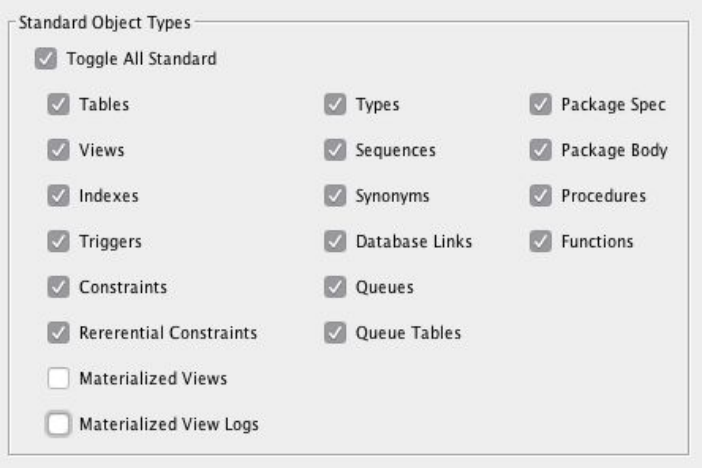
7. Create the explain plan for the last step (add a screenshot or copy and paste the information returned) **(0.5)**

8. Read https://www.toptal.com/database/database-design-bad-practices and create a mental map with the information of the article. **(0.5)**

9. Read https://eng.uber.com/mysql-migration/ and create an essay talking about their challenges, problems, comparison between MySQL and Postgresql. **(0.5)**

10. Export the database as you did in the mid term exam **(0.5)**:





Importante:

- **Use el usuario creado con el perfil DBA en el trabajo 1, si usted creó las tablas con el usuario SYSTEM, cree las tablas, constraints, vistas, funciones, procedimientos, inserciones de datos con el usuario DBA. De esta forma es más fácil exportar la BD para que aparezcan únicamente los objetos asociados a este usuario.**

- **Realice las correcciones que considere necesarias para soportar el nuevo esquema, siga las recomendaciones descritas en la retroalimentación del taller 1.**
- **Los grupos de trabajo no deben ser cambiados (excepto las personas que trabajaron individual, estas personas tienen la posibilidad de buscar a otra persona que también haya trabajado de forma individual)**
- **Cada integrante debe tener al menos 2 commits.**
- **Utilice el mismo repositorio del trabajo 1, cree una carpeta en la raíz llamada "assignment II", dentro del directorio, crear los archivos que considere necesarios.**