CS 207: Applied Database Practicum
In-Class Activity 6: Introduction to Stored Functions, Cursors and Triggers, 17th September, 2018

In this activity, you will be working in Mysql.

Q1. In this question load the database from the dump file (join.sql) given in moodle

The Database has the following tables:

Customers: stores customer's data.

Products: stores a list of scale model cars.

ProductLines: stores a list of product line categories.

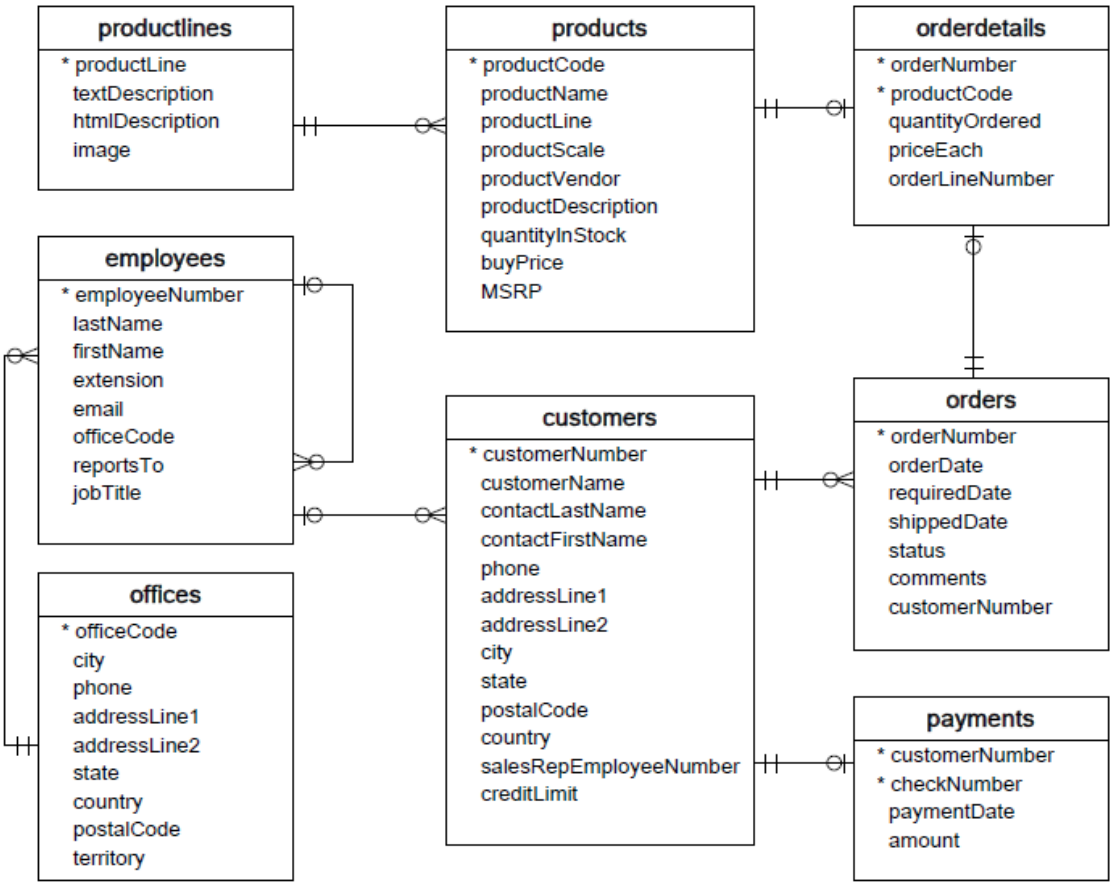
Orders: stores sales orders placed by customers.

OrderDetails: stores sales order line items for each sales order.

Payments: stores payments made by customers based on their accounts.

Employees: stores all employee information as well as the organization structure such as who reports to whom.

Offices: stores sales office data.



Q1. Create a stored function that takes as input the creditlimit of a customer from the **customers** table and assigns the following CustomerLevel to each customer:

i) if creditLimit > 50000 then assign CustomerLevel=**PLATINUM**
ii)if creditLimit <=50000 and creditLimit >=10000 then assign CustomerLevel=**GOLD**
iii) if creditLimit <=50000 then assign CustomerLevel=**SILVER**

The output should be something similar to the image below

customerName	CustomerLevel(creditLimit)
Alpha Cognac	PLATINUM
American Souvenirs Inc	SILVER
Amica Models & Co.	PLATINUM
ANG Resellers	SILVER
Anna's Decorations, Ltd	PLATINUM
Anton Designs, Ltd.	SILVER
Asian Shopping Network, Co	SILVER
Asian Treasures, Inc.	SILVER
Atelier graphique	GOLD
Australian Collectables, Ltd	PLATINUM
Australian Collectors, Co.	PLATINUM

Q2. Create a table temp with the following schema:

Field	Type	Null	Key	Default	Extra
customerNumber	int(11)	NO	PRI	NULL	
Value	varchar(255)	YES		NULL	

Create a stored procedure containing a cursor that
i) Fetches the customerNumber and creditLimit from **customers** table
ii) Fetches the customerNumber and Total amount paid by each customer from **payments** table
iii) If the Total amount > creditLimit then insert into the **temp** the customerNumber and "**limit exceeded**"
iv) If the Total amount < creditLimit then insert into the **temp** the customerNumber and "**below limit**".
The output should be something similar to the image below

```
mysql> select * from temp limit 4$$
+----------------+----------------+
| customerNumber | Value          |
+----------------+----------------+
|            103 | limit exceeded |
|            112 | limit exceeded |
|            114 | limit exceeded |
|            119 | below limit    |
+----------------+----------------+
4 rows in set (0.00 sec)
```

BONUS: ONLY if you have done the above steps, then you can try this bonus for an extra point.
Q3. Create a table **payments_copy** having exactly the same schema as the table **payments (The schema is given below)**

Field	Type	Null	Key	Default	Extra
customerNumber	int(11)	NO	PRI	NULL	
checkNumber	varchar(50)	NO	PRI	NULL	
paymentDate	date	NO		NULL	
amount	decimal(10,2)	NO		NULL	

Copy the contents of the table **payments** into the table **payments_copy.**