

ASSIGNMENT 4: Understanding Joins, Stored Procedure and Cursors**(In groups of 4-5 students containing B. Tech. 2nd years)****Dr. Varun Dutt****Due: Before 12:00 NOON on September 30th, 2019**

Readings:

- Class notes and slides from week 4 and 5
- Activity 4 and 5 on Moodle

Objectives:

- Understand how Join works
- Understand how stored procedures works
- Understand how cursors work

Submission:

Each group will make one single submission.

Please submit as a zipped file, the following content:

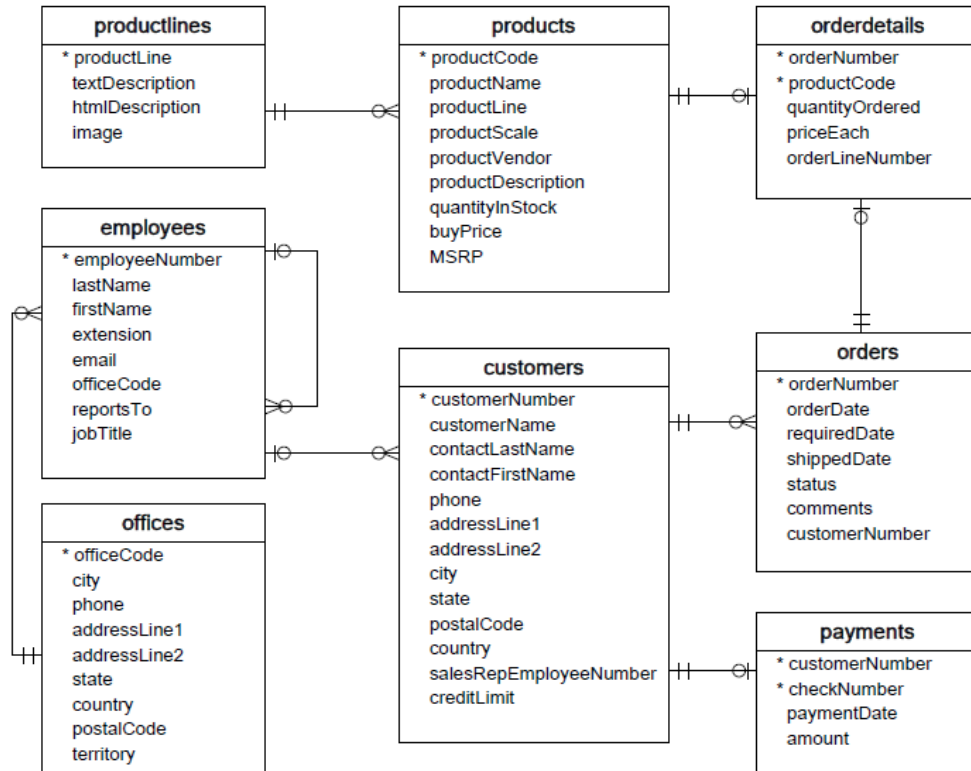
- Submit a .docx/.doc/.odt /.txt/.sql file containing the code.
- Also submit the mysql dump files.

Assignment:

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.



- i) Find the total quantity (**orderdetails table**) ordered by each customer (**customer table**) for different orders (**orders table**).
- ii) List the names of the customers (**customer table**) who have made no orders (**orders table**)
- iii) Show the employee name (**employees table**) and the number of customers (**customers table**) of each employee in descending order.
- iv) List the name of the Products (**products table**) ordered by the customer “**Muscle Machine Inc**” (**customers table**).
- v) List the number of times each product (**products table**) has been ordered.
- vi) Display the product (**products table**) which has never been ordered by any customer (**customers table**).

Q2. Load the dump file (Assignment 4) uploaded in moodle

- i) Find the average Mark of students in all exams
- ii) Find the maximum mark of each student in all exams
- iii) Find the maximum mark of each month for all students
- iv) Find the average mark of each month for all students

Q2. Create a table **Number** similar to the schema given above. Then create a stored procedure that will insert 'n' random numbers (floats) into the table **Number**. The value of 'n' is given by the user.

Field	Type	Null	Key	Default	Extra
rnumber	float	YES		NULL	

Q3. Create a stored procedure that sums the even numbers between 1 and x where x is given by the user.

Q4)

(i) Create a table named **customer_quantity_copy** with the following schema:

```
mysql> describe customer_quantity_copy$$
```

Field	Type	Null	Key	Default	Extra
customerName	varchar(255)	YES		NULL	
QUANTITY	int(11)	YES		NULL	

2 rows in set (0.00 sec)

ii) Create a stored procedure that used a cursor that fetches the total orders (**orderdetails** table) placed by each customer (**customers** table) and store it in the **customer_quantity_copy** table.