Computer Engineering Department, SVNIT, Surat
B.Tech- II Database Management System
Tutorial
(Based on Nested subqueries)

1. Consider the following table data and write the query for following
   I) If user wants to fetch the all records of Employees whose salary is greater than 25000.
   II) User has created the replica of Employee table and needs the data where salary is greater than 25000. The Employee table replica name is Employee_Bkp.

Table :1: Employee table

Employee No	Employee Name	Department
1	XYZ	Development
2	ABC	Testing
3	PQR	Database

Table:2: Salary table

Employee No	Salary
1	35000
2	40000
3	25000

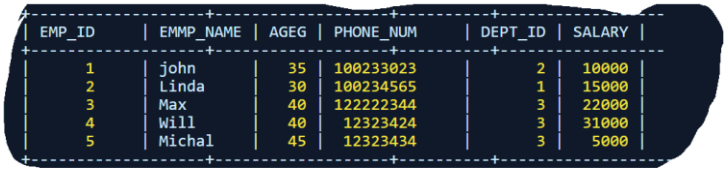
2. Give the output of the following queries (make necessary assumption by your self and write in your words)
   I)

```
SELECT subject, MAX(salary_by_subject.avg_salary) AS max_salary
FROM (
   SELECT subject, AVG(monthly_salary) AS avg_salary
   FROM teachers
   GROUP BY subject) salary_by_subject;
```

   II)

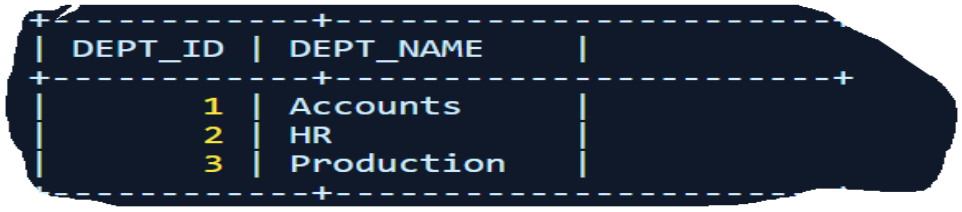
```
SELECT *
FROM students
WHERE class_id = (
   SELECT id
   FROM classes
   WHERE number_of_students = (
      SELECT MAX(number_of_students)
      FROM classes));
```

3. Consider the following tables and give the output of following queries.(if find error then correct the query and write the answer)
   Employee table:



EMP_ID	EMMP_NAME	AGEG	PHONE_NUM	DEPT_ID	SALARY
1	john	35	100233023	2	10000
2	Linda	30	100234565	1	15000
3	Max	40	122222344	3	22000
4	Will	40	12323424	3	31000
5	Michal	45	12323434	3	5000

Department table:



DEPT_ID	DEPT_NAME
1	Accounts
2	HR
3	Production

I)

```
SELECT * FROM EMPLOYEE
 WHERE DEPT_ID =
 (SELECT DEPT_ID FROM DEPARTMENTS );
```

II)

```
select * from employee where emp_id in
(select emp_id from employee
where salary > 10000);
```

4) Consider the example of an accounts payable system, where the details of the vendors and purchase orders are maintained and the goods are provided on 60 day credit. Suppose there has been a change to the credit amount to 20% for a vendor from existing 10%. Then Write a query for it

5) Write a query in sql to find the name, city, and the total sum of orders amount a salesman collects. Salesman should belong to the cities where any of the customer belongs.

Salesman table

salesman_id	name	city	commission
5001	ABC	Ahmedabad	0.15
5006	XYZ	Surat	0.11
5007	PQR	Vadodara	0.14
5003	MNO	Rajkot	0.13
5002	BCD	Jamnagar	0.12
5005	JKL	Bhavnagar	0.13

Customer table

customer_id	cust_name	city	grade	Salesman_id
3002	Nick	Ahmedabad	100	5001
3007	Brad	Ahmedabad	200	5001
3005	Zusi	Bharuch	200	5002
3008	Green	Mehsana	300	5002
3004	Jozy	Patan	300	5006
3009	Alter	Rajkot	100	5003
3003	Walter	Vadodara	200	5007