## **Department of Computer Science and Engineering**

Course Code: CSE 370	Credits: 3.0
Course Name: Database Systems	

## Lab Homework 3

Proving yourself worthy of being able to handle bigger tasks, the tech lead has decided to give you a challenging job. However, this time, the data that you would be handling is very sensitive and no one wants this data to be leaked. Therefore, instead of getting the entire table, the tech lead has given you the list of attributes that the table contains and the table name. The information given is as follows:

Table Name: employees	
Attribute Name	Attribute type
employee_id	char(10)
first_name	varchar(20)
last_name	varchar(20)
email	varchar(60)
phone_number	char(14)
hire_date	date
job_id	int
salary	int
commission_pct	decimal(5,3)
manager_id	char(10)
department_id	int

You are tasked with building the queries to retrieve the following information [test out your queries with dummy data]:  $[7 \times 2 = 14]$ 

- 1. Find the **first\_name**, **last\_name**, **email**, **phone\_number**, **hire\_date** and **department\_id** of all the employees with the latest **hire\_date**.
- 2. Find the *first\_name*, *last\_name*, *employee\_id*, *phone\_number*, *salary* and *department\_id* of all the employees with the lowest *salary* in each department.
- Find the first\_name, last\_name, employee\_id, commission\_pct and department\_id of all the employees in department XYZABC (department\_id = 7) who have a lower commission\_pct than all of the employees of department ABCXYZ(department\_id = 5).
- 4. Find the **department\_id** and total number of employees of each departments which does not have a single employee under it with a **salary** more than 30,000.
- 5. For each of the departments, find the **department\_id**, **job\_id** and **commission\_pct** with **commission\_pct** less than at least one other **job\_id** in that department.
- 6. Find the *manager\_id* who does not have any employee under them with a *salary* less than 3500.
- 7. Find the *first\_name*, *last\_name*, *employee\_id*, *email*, *salary*, *department\_id* and *commission\_pct* of the employee who has the lowest *commission\_pct* under each manager.