## Database Systems Lab

Fall 2016

FAST-NU Peshawar Campus

Assignment # 2: Weightage: 4

Due Date: 25 September 2016

A note of warning: Start work on assignments as soon as they are given. Do not underestimate the demanding nature of this course. Expect the system to crash the night before your program is due. Aim to have it done the day before.

Submit the assignment on <u>slate.</u> Do not email me assignments after due date. It will not be accepted in any case. Students are required to submit actual content written in MS word or Pdf. Hand written/ Scanned assignments will not be accepted.

## Create the following tables.

Student (ID, name, dept-name, tot-cred)
Instructor (ID, name, dept-name, salary)
Course (Course-id, title, dept-name, credits)
Takes (ID, course-id, sec-id, semester, year, grade)
Classroom (building, room-number, capacity)
Department (dept-name, building, budget)
Section (course-id, section-id, semester, year, building, room-number, time-slot-id) Teaches (id, course-id, section-id, semester, year)
Advisor (s-id, i-id)
Time-slot (time-slot- id, day, start-time, end-time) Prereq (course-id, prereq-id)

Provide Screen shots of the following queries

- 1. Insert at least 10 entries in each table.
- 2. List all the instructors whose Id is an even number.
- 3. List all the students whose total credits is less the 18 and not of CSE department
- 4. List all Students with names and their department names.
- 5. List all instructors in CSE department.
- 6. Find the names of courses in CSE department which have 3 credits.
- 7. For the student with ID 12345 (or any other value), show all course-id and title of all courses registered for by the student.
- 8. List all the instructors whose salary is in between 40000 and 90000.

- 9. Change the advisor id of students with id between 100 and 200 to 1001.
- 10. Transfer all the instructors of IT department to CSE department.
- 11. Raise the salary of all the instructors by 5%.
- 12. Delete the IT department.
- 13. Waive off perquisite for the course with course id 101.
- 14. Add a column Date\_of\_birth to student table.
- 15. Change the size of the dept-name to varChar (20).
- 16. Drop the column Date\_of\_birth from student table.
- 17. Remove all the students of CSE Department.
- 18. Remove all the instructors whose salary is less than 20000 and greater than 10000.
- 19. Display the instructor table data in descending order with respect to instructor id.
- 20. Add new department Software Engineering and shift all the students from CSE to this department.

Note: Run all the queries by yourself and provide the screen shots in a pdf file. Zero level tolerance for plagiarized Assignment and will receive zero credit straight away.

