

Database Systems Lab

Fall 2016

FAST-NU
PeshawarCampus

Assignment # 2:

Weightage: 4

Due Date: 7 October 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 [slate](#). 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. Find the average salary of instructors in the CSE department.
2. Find the number of students in each course.
3. Find those departments where the average numbers of students are greater than 10.
4. Find the total number of courses in each department.
5. Find the names and average salaries of all departments whose average salary is greater than 42000.
6. Find courses offered in Fall 2009 and in Spring 2010.

7. Find names of instructors with salary greater than that of some (at least one) instructor in the Biology department.
8. Find the names of all instructors whose salary is greater than the salary of all instructors in the Biology department.
9. Find the names of courses in CSE department which have 3 credits.
10. Change the advisor id of students with id between 100 and 200 to 1001.
11. Transfer all the instructors of IT department to CSE department.
12. Raise the salary of all the instructors by 5%.
13. Delete the IT department.
14. Waive off prerequisite for the course with course id 101.
15. Change the size of the dept-name to varChar (20).
16. Drop the column Date_of_birth from student table.
17. Find the maximum total salary across the departments.
18. Find the average instructors' salaries of those departments where the average salary is greater than \$42,000.
19. Find all departments with the maximum budget.
20. Find the sum of the salaries of all instructors of the 'CSE' department, as well as the maximum salary, the minimum salary, and the average salary in 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.

Good Luck 😊 !