

CS 313: Databases and Information Systems Laboratory

Autumn 2022-23, IIT Dharwad

Assignment 4

Date: 13th September 2022

Total: 70 Points

-
1. Create a user called universityDB+last 4 digits of roll number. **5 Points**
Ex: universityDB0001 (Then connect mysql terminal with this user)
[Add the screen shots of the result]
 2. Create a database called university. **3 Points**
[Add the screen shots of the Command and result]
 3. Connect the database using the following command. **2 Points**
use university;
[Add the screen shots of the result]
 4. Create the tables in the university database using DDL.sql file. **5 Points**
>source path_to_file\DDL.sql(we have shared these .sql files on moodle)
Execute show tables command to check tables.
>show tables;
[Add the screen shots of the Command and result]
 5. Load the data into tables using insert.sql (This will take some time as the data is very huge) **5 Points**
>source path_to_file/insert.sql (we have shared these .sql files on moodle)
[Add the screen shots of the Command and result]
 6. Get the details of all the tables using information_schema. **10 Points**
(instructions are given at the end of this document)
[Add the screen shots of the Query and result]
 7. Install Phpmyadmin tool (if not installed) for interacting with MySql using a GUI interface.
Spend some time learning various features of PhpMyAdmin.
 1. Login to the user which you have created in Question number 1
 2. Use database University
 3. Do some 1 insert and select operation on each table of the University database*(we have shared the documentation on Phpmyadmin on moodle)*
[Add the screen shots of the result] **15 Points**
 8. Execute the following queries :**[Execute these queries in PhpMyadmin]** **20 Points**
 - i. Find the course id, title, instructor id and name of those instructors who are from CSE department but are teaching a course of Civil department in the year 2009. Arrange results in ascending order of instructor names.
 - ii. Add a new course with course_id as cs333 (with suitable values for other attributes) for the CSE department which will have cs303 as a prerequisite. Write insert statements for the same.

iii. Update salaries of instructors by 10% if their departments have a budget of more than 900000 rupees. Write the update statements for the same.

iv. Find CSE department courses (id and title) and number of students taking that course in the year 2007 and semester Fall where the number is greater than 15. Arrange the results in ascending order of course id.

[Please submit queries in .sql file for 8_i, 8_ii and 8_iii, Add the screen shots of the result in report(.pdf)]

9. Demonstration of the working commands and queries

5 Points

NOTE:

1. Due date for Assignment is **13th September 2022 (11:59PM)**.
2. Submit the .pdf file named with your **<roll_number>.pdf**
3. Mode of submission is moodle.
4. **Evaluation: Answers and execution of a working query of all questions should be shown to the TAs during Lab hours on Monday (26th September 2022). Demo is mandatory.**
5. We will run a plagiarism check for all the submissions.
6. Penalty for late submission is 15% of secured marks.
7. Penalty for plagiarism is 100% of the secured marks.

Instruction for Information schema

1. **mysql> SELECT table_name, column_name, data_type**
-> FROM
-> information_schema.columns
-> WHERE
-> table_name = 'student';

You can replace the *student* table with other table names.