

HW-3 DDL_DML

Overview

- Assignment points: 10 points or **10%** toward your final grade.
- Due date: **10/12/2021, 11:59 pm**.
- Late submission: grace period of 2 days with 20% late penalty. After that time, assignment will NOT be accepted.
- Submission: submit your assignment in PDF format in Canvas. You can use word, excel or similar tools and convert into pdf.
- This is open book exam and any kind of resource materials are allowed.
- Collaborations and consultations are NOT allowed. Do your own work.

This assignment will give you hands-on practice in working with DDL, DML and Constraints using MySQL workbench tool. Grade points will be given to correct answers as well as clean and clear coding, e.g. formatting, indentation, consistent upper/lower cases, etc., where applicable.

Questions:

- You must submit your **SQL scripts for each question. All Questions are equally weighted.**
- It is best practice to check answer with describe and/or select statements, where applicable.

1. Create Database schema called **ClassAssignment**

Use ClassAssignment database for rest of the exercise.

2. Create a table called **Project** with the following columns:

```
project_num INT NOT NULL PRIMARY KEY
project_code CHAR(4)
project_title VARCHAR(45)
first_name VARCHAR(45)
last_name VARCHAR(45)
project_budget DECIMAL(5,2)
```

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3. Modify **project_num** to auto_increment and also auto_increment starts from 10.

4. Modify **project_budget** datatype from decimal (5, 2) to (10, 2).

5. Insert following values into the **Project** table.

DO NOT insert project_num. Auto_increment should start from **10**

project_code	project_title	first_name	last_name	project_budget
PC01	DIA	John	Smith	10000.99
PC02	CHF	Tim	Cook	12000.50
PC03	AST	Rhonda	Smith	8000.40

6. Create a table **PayRoll** with the following info:

```
employee_num INT PRIMARY KEY AUTO_INCREMENT
job_id INT NOT NULL
job_desc VARCHAR(40)
emp_pay DECIMAL (10,2)
```

7. Alter PayRoll table with the following, make sure to write each script separately.

i. Add constraint on emp_pay so that only value greater than 10,000 can be inserted.

ii. Add constraint on job_desc so that default value set to 'Data Analyst'.

iii. Add column pay_date (DATE) after job_desc.

8. Add Foreign Key constraint in PayRoll table with job_id column referencing to project_num column in Project table.

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9. Insert following values into PayRoll table. **DO NOT insert** employee_num and job_desc, those should be auto populated using auto_increment and default values, respectively.

job_id	pay_date	emp_pay
10	current date	12000.99
11	current date	14000.99
12	current date	16000.99

10. Update emp_pay in PayRoll table for **employee_num = 2** with 10% emp_pay increase.
11. Create Project_backup table from project table you created above using bulk insert statement only for last_name 'Smith'.
12. Create VIEW as PayRoll_View from PayRoll table you created above. However, your VIEW should only contain job_id, job_desc and pay_date for job_id > 10.
13. Create Index for pay_date on PayRoll table.
14. Delete all data from project_backup table but keep the table structure.
15. Write a DELETE script to delete a row from Project table where project_num = 10. If there is an error, give a short explanation of what/why about error msg?
16. Solve the question 15 above without error, i.e. write a script how you can delete.

😊😊 The End. 😊😊