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Student ID.....
Track.....

**Faculty of Information and Communication Technology
Mahidol University**

**Week15 Mock Exam
Second Semester, 2022**

<p>Date: April 27, 2023 Subject: ITCS393 Database System Lab</p> <p>Instructors : Dr. Petch Sajjacholapunt Dr. Wudhichart Sawangphol Dr. Jidapa Kraisangka</p>	<p>Time: 9:30-10.30 PM. The exam consists of 1 Part (2 questions)</p> <p>There are 4 pages in this examination paper (including the cover page)</p> <p>Total points: 2 points</p>
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Directions:

1. This is an Limited-Note Exam examination.
2. All kinds of dictionary are not allowed.
3. Please fill in your name and your student ID on the top of esqach page.
4. You have to follow the lab exam instruction strictly.
5. You are required to check and verify the total pages and total number of questions in this examination paper.

Questions	Full Points	Your Points
Q1	1	
Q2	1	
Total	2	

Cheating in the Examination will result in a severe penalty from Mahidol University
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Lab Exam Instruction

1. In the lab exam, you are only allowed to run *MYSQL Workbench 8.0 CE*, but not any other program that attempts to access files or sites irrelevant to exam.
2. Download the Lab exam files from MyCourse system: **itcs393_Lab_package.zip**
3. Extract the content in “**itcs393_Lab_package.zip**”

File **6588XXX.sql** will be used for all questions. It is just an example of the submission file. **You must write down your name, your student’s ID and your track at the first line.** For each answer, you must include the **question number** in the comment and the query as shown below:

```
-- FirstName LastName, 6588999, Track DB
-- Q1.1 -
SELECT *
FROM EMPLOYEE

-- Q1.2 --
select *
from CUSTOMER
```

6588XXX.sql

4. After you are done with all the exam questions, save all your SQL code in a file named “**6588XXX.sql**”, where **XXX** is to be replaced with the last 3-digit of your student’s ID.
5. Zip **file** into a zip file named as **6588xxx.zip** and submit it on MyCourses system.

Notes:

1. *You must follow the format mentioned above strictly. If there is no questions numbers in your answer, **that answer will be ignored.***
2. *Your file may be lost if the machine reboots or crashes, so save your works and upload your current state of your submission frequently. You can keep uploading your submissions, the most recent one will be graded. **We will not extend the time if you lose your files. It is your responsibility to submit frequently.***
3. *If you believe the machine, you are using does not function, notify a proctor immediately.*
4. *Make sure your submission was successfully submitted and recorded. You may download your submitted file to recheck your content.*

Q1: (1 points) Create Table and Constraints

Use the database “TestTrigger” Download from the **Starter Package**. Then Create table named “LogFileAudit” that contain the following information:

Table: LogFileAudit

Column Name	Description	Data Type	Required?	PK/FK
LogID	Log Identification Number	VARCHAR(255)	Y	PK
Log_Action	Action of the system	VARCHAR(255)	Y	
tableName	Name of table object	VARCHAR(255)	Y	

Table: person

Column Name	Description	Data Type	Required?	PK/FK
pid	Person ID	VARCHAR(255)	Y	PK
fullname	Person fullname	VARCHAR(255)	Y	
budget	Budget of the person	DECIMAL(255)	Y	
proj_id	Project Identification number	VARCHAR(255)		

Table: project

Column Name	Description	Data Type	Required?	PK/FK
proj_id	Project ID	VARCHAR(255)	Y	PK
proj_name	Project Name	VARCHAR(255)	Y	
Total_budget	Total budget of the project	DECIMAL(255)	Y	

Q2: (1 points) Trigger

2.1 Create a trigger *addLogINS* to insert a log data into *LogFileAudit* after inserting data into the *person* table. (0.5 points)

1. The LogID value is the max value of LogID + 1
2. The Action value is 'INSERT', and
3. The TableName value is 'person'

Having created Trigger, you can test your query by insert the following data into table '**person**':

PID=011, Full_name = 'AAA', Budget=20000, Proj_id=1

Result:

	logId	log_Acti...	tableNa...
1	1	INSERT	person

2.2 Create a trigger *addLogDEL* to insert a log data into *LogFileAudit* after deleting data from the *project* table. (0.5 points)

1. The LogID value is the max value of LogID + 1
2. The Action value is 'DELETE', and
3. The TableName value is 'projects'

Having created Trigger, you can test your query by delete data where the projectID=4 in table '**project**':

Result:

	logId	log_Acti...	tableNa...
1	1	INSERT	person
2	2	DELETE	projects