ITCS393 Database Systems Lab

Lab13 Exercise

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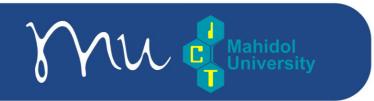
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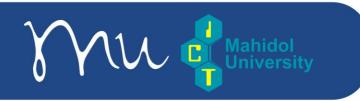
- Instructions
    1. Write the SQL commands to answer all questions
    2. Save your final SQL script rename it as
       "**L13grYidxx88xxx.sql**".
        - Y is your study Group
        - xx88xxx is your student ID

    3. Submit the SQL file on Mycourses.

Q1. Do the following steps to create trigger

- Create table LogFileAudit that contain LogID: VARCHAR(225) as a PRIMARY KEY, Action: VARCHAR(225) NOT NULL, and TableName: VARCHAR(225) NOT NULL.

- Create a trigger addLogINS to insert a log data into *LogFileAudit* after inserting data into the person table.
  - The LogID value is the max value of LogID + 1
  - The Action value is 'INSERT', and
  - The TableName value is 'person'

- Create a trigger addLogDEL to insert a log data into *LogFileAudit* after deleting data from the project table.
  - The LogID value is the max value of LogID + 1
  - The Action value is 'DELETED', and
  - The TableName value is 'project'

Q1. Test by the following SQL Script

```
INSERT INTO person (pid, full_name, budget, proj_id)
VALUES ('011', 'John Doe', 1000.00, '1');
```

pid	full_name	budget	proj_id
009	Hina Siddiqui	23000.00	3
010	Joanne Mills	25000.00	4
011	John Doe	1000.00	1

	LogID	Action	TableName
▶	1	INSERT	person

```
DELETE FROM project WHERE proj_id = '1';
```

	proj_id	proj_name	total_budget
▶	2	Project 2	35000.00
	3	Project 3	98000.00
	4	Project 4	25000.00

	LogID	Action	TableName
▶	1	INSERT	person
	2	DELETE	project

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Q2. Create a trigger "cascade_insert" to insert a new record into the project table after inserting a new person into the person table, if the project id does not exist yet in the project table.

- The new project record, will have a default project_name as (Unknown) and the total_budget is equal to the person's budget
- After executing this insert command, the expected data in these two tables are shown below

INSERT INTO person (pid, full_name, budget, proj_id)   VALUES ('012','Harry Potter', 15000, 5);

person

	pid	full_name	budget	proj_id
▶	001	Peter Copper	20000.00	1
	002	Sarah MaCorr	10000.00	1
	003	Henry Pipe	25000.00	1
	004	Wilman Kala	30000.00	2
	005	Matti Karttunen	5000.00	2
	006	Luke Miller	21000.00	3
	007	Margaret Johnson	22000.00	3
	008	Bruce Randall	32000.00	3
	009	Hina Siddiqui	23000.00	3
	010	Joanne Mills	25000.00	4
	011	John Doe	1000.00	1
	012	Harry Potter	15000.00	5

project

	proj_id	proj_name	total_budget
▶	2	Project 2	35000.00
	3	Project 3	98000.00
	4	Project 4	25000.00
	5	Unknown	15000.00