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Assignment: Assignment: Movies: Update & Deletes [Module 8.2 Assignment of (Module 8: SQL Insert & Delete Using Python)]

GitHub link: <https://github.com/SharmaArun017/CSD310.git>

Pyhton Code:

import mysql.connector # Import the MySQL connector library

# Connect to the MySQL database

db = mysql.connector.connect(

host="localhost", # Database host

user="root", # Database user

password="8gY&7LzW2q!", # Database password

database="movies" # Database name

)

cursor = db.cursor() # Create a cursor object to interact with the database

def show\_films(cursor, title):

"""

Function to display films with their details from the 'film' table.

This function joins 'film', 'genre', and 'studio' tables to get comprehensive film details.

"""

# SQL query to select film name, director, genre, and studio

query = """

SELECT

film\_name AS Name,

film\_director AS Director,

genre\_name AS Genre,

studio\_name AS Studio

FROM film

INNER JOIN genre ON film.genre\_id = genre.genre\_id

INNER JOIN studio ON film.studio\_id = studio.studio\_id;

"""

cursor.execute(query) # Execute the SQL query

results = cursor.fetchall() # Fetch all the results of the query

print(f"-- {title} --") # Print the title for the current display of films

for row in results: # Iterate over each row in the results

print(f"Film Name: {row[0]}") # Print film name

print(f"Director: {row[1]}") # Print film director

print(f"Genre: {row[2]}") # Print film genre

print(f"Studio: {row[3]}") # Print film studio

print() # Print a blank line for better readability

# Display the initial films in the database

show\_films(cursor, "DISPLAYING FILMS")

# Insert a new film record into the 'film' table

insert\_query = """

INSERT INTO film (film\_name, film\_releaseDate, film\_runtime, film\_director, studio\_id, genre\_id)

VALUES ('Inception', '2010', 148, 'Christopher Nolan',

(SELECT studio\_id FROM studio WHERE studio\_name = '20th Century Fox'),

(SELECT genre\_id FROM genre WHERE genre\_name = 'SciFi'));

"""

cursor.execute(insert\_query) # Execute the insert query

db.commit() # Commit the transaction to save the changes to the database

# Display the films after the new record has been inserted

show\_films(cursor, "DISPLAYING FILMS AFTER INSERT")

# Update the genre of the film 'Alien' to 'Horror'

update\_query = """

UPDATE film

SET genre\_id = (SELECT genre\_id FROM genre WHERE genre\_name = 'Horror')

WHERE film\_name = 'Alien';

"""

cursor.execute(update\_query) # Execute the update query

db.commit() # Commit the transaction to save the changes to the database

# Display the films after the update

show\_films(cursor, "DISPLAYING FILMS AFTER UPDATE")

# Delete the film 'Gladiator' from the 'film' table

delete\_query = """

DELETE FROM film

WHERE film\_name = 'Gladiator';

"""

cursor.execute(delete\_query) # Execute the delete query

db.commit() # Commit the transaction to save the changes to the database

# Display the films after the deletion

show\_films(cursor, "DISPLAYING FILMS AFTER DELETE")

# Close the cursor and the database connection

cursor.close() # Close the cursor

db.close() # Close the database connection

= Output :

-- DISPLAYING FILMS --

Film Name: Alien

Director: Ridley Scott

Genre: Horror

Studio: 20th Century Fox

Film Name: Get Out

Director: Jordan Peele

Genre: Horror

Studio: Blumhouse Productions

Film Name: Inception

Director: Christopher Nolan

Genre: SciFi

Studio: 20th Century Fox

-- DISPLAYING FILMS AFTER INSERT --

Film Name: Alien

Director: Ridley Scott

Genre: Horror

Studio: 20th Century Fox

Film Name: Get Out

Director: Jordan Peele

Genre: Horror

Studio: Blumhouse Productions

Film Name: Inception

Director: Christopher Nolan

Genre: SciFi

Studio: 20th Century Fox

Film Name: Inception

Director: Christopher Nolan

Genre: SciFi

Studio: 20th Century Fox

-- DISPLAYING FILMS AFTER UPDATE --

Film Name: Alien

Director: Ridley Scott

Genre: Horror

Studio: 20th Century Fox

Film Name: Get Out

Director: Jordan Peele

Genre: Horror

Studio: Blumhouse Productions

Film Name: Inception

Director: Christopher Nolan

Genre: SciFi

Studio: 20th Century Fox

Film Name: Inception

Director: Christopher Nolan

Genre: SciFi

Studio: 20th Century Fox

-- DISPLAYING FILMS AFTER DELETE --

Film Name: Alien

Director: Ridley Scott

Genre: Horror

Studio: 20th Century Fox

Film Name: Get Out

Director: Jordan Peele

Genre: Horror

Studio: Blumhouse Productions

Film Name: Inception

Director: Christopher Nolan

Genre: SciFi

Studio: 20th Century Fox

Film Name: Inception

Director: Christopher Nolan

Genre: SciFi

Studio: 20th Century Fox

Output Image :

