

Assignment 7: Prepare a series of SQL statements to INSERT new records into the library tables, UPDATE existing records with new information, and DELETE records based on specific criteria. Include BULK INSERT operations to load data from an external source."

Step-1: INSERT New Records

Example: *Inserting a new book into the Books table*

```
INSERT INTO Books (title, author, isbn, published_year, available_copies, publisher_id, genre)
VALUES ('The Hobbit', 'J.R.R. Tolkien', '9780547928227', 1937, 5, 1, 'Fantasy');
```

Step-2: UPDATE Existing Records

Example: *Updating the available copies of a book*

```
UPDATE Books SET available_copies = 8 WHERE title = 'To Kill a Mockingbird';
```

Step-3: DELETE Records Based on Specific Criteria

Example: *Deleting a book from the Books table*

```
DELETE FROM Books WHERE title = '1984';
```

Step-4: BULK INSERT Operations

Example: *Bulk inserting data from an external source into the Books table*

Assuming you have a CSV file named books_data.csv with columns in the same order as the Books table, you can use the LOAD DATA INFILE statement to perform a bulk insert:

```
LOAD DATA INFILE '/path/to/books_data.csv'
INTO TABLE Books
FIELDS TERMINATED BY ',' ENCLOSED BY '"'
LINES TERMINATED BY '\n'
(title, author, isbn, published_year, available_copies, publisher_id, genre);
```

Note:

- Make sure to adjust the file path and column order in the LOAD DATA INFILE statement based on your actual CSV file.
- Always ensure the integrity of the data being inserted or updated, especially when using bulk operations.
- It's a good practice to perform backups before performing bulk operations or making extensive changes to the database.