

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.

Solution:-

Table:

Books:

Fields: BookID (Primary Key), Title, Author, PublicationYear, AvailableCopies

INSERT Records:

-- Insert a new book

```
INSERT INTO Books (BookID, Title, Author, PublicationYear, AvailableCopies)
VALUES (1, 'To Kill a Mockingbird', 'Harper Lee', 1960, 15);
```

-- Insert another book

```
INSERT INTO Books (BookID, Title, Author, PublicationYear, AvailableCopies)
VALUES (2, '1984', 'George Orwell', 1949, 10);
```

UPDATE Records:

-- Update the available copies of a book

```
UPDATE Books SET AvailableCopies = 12 WHERE BookID = 1;
```

DELETE Records:

-- Delete a book from the library

```
DELETE FROM Books WHERE BookID = 2;
```

BULK INSERT Operation:

```
BULK INSERT Books
FROM 'C:\path\to\books.csv'
```

```
WITH
```

```
(
```

```
    FIELDTERMINATOR = ',', -- Specify the field terminator
```

```
    ROWTERMINATOR = '\n', -- Specify the row terminator
```

```
    FIRSTROW = 2          -- Skip the header row if present
```

```
);
```

This script will bulk insert records from the CSV file into the Books table.