

**/\*Practical No : 04  
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Batch: T1\*/**

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**/\*WRITE A PL/SQL BLOCK TO CREATE CURSOR TO COPY CONTENTS OF  
ONE TABLE INTO ANOTHER. AVOID REDUNDANCY. \*/**

-- Step 1: Create Database and Use it

**CREATE DATABASE library;**

**USE library;**

-- Step 2: Create Borrower and Fine Tables

**CREATE TABLE borrower (  
    rollno INT PRIMARY KEY,  
    name VARCHAR(20),  
    dateofissue DATE,  
    nameofbook VARCHAR(20),  
    status VARCHAR(1)  
);**

**CREATE TABLE fine (  
    rollno INT,  
    returndate DATE,  
    amount INT,  
    FOREIGN KEY (rollno) REFERENCES borrower(rollno)  
);**

-- Step 3: Insert Sample Data into Borrower Table

**INSERT INTO borrower VALUES (1, 'dhiraj', '2021-06-01', 'SEPM', 'I');  
INSERT INTO borrower VALUES (2, 'suyog', '2021-05-01', 'OOP', 'I');  
INSERT INTO borrower VALUES (3, 'pramod', '2021-06-15', 'DBMS', 'I');  
INSERT INTO borrower VALUES (4, 'farhan', '2021-06-30', 'DSA', 'I');  
INSERT INTO borrower VALUES (5, 'pramod', '2021-07-05', 'ADS', 'I');**

-- Step 4: Display Borrower Table to Verify Insertion

**SELECT \* FROM borrower;**

-- Step 5: Create Stored Procedure to Calculate Fine

**DELIMITER \$\$**

**CREATE PROCEDURE calc\_fine\_lib(IN roll INT)  
BEGIN**

**DECLARE fine1 INT DEFAULT 0;**

**DECLARE noofdays INT;**

**DECLARE issuedate DATE;**

**SELECT dateofissue INTO issuedate FROM borrower WHERE rollno = roll;**

```
SELECT DATEDIFF(CURDATE(), issuedate) INTO noofdays;
```

```
IF noofdays > 15 AND noofdays <= 30 THEN
```

```
    SET fine1 = noofdays * 5;
```

```
    INSERT INTO fine VALUES (roll, CURDATE(), fine1);
```

```
ELSEIF noofdays > 30 THEN
```

```
    SET fine1 = ((noofdays - 30) * 50) + (30 * 5);
```

```
    INSERT INTO fine VALUES (roll, CURDATE(), fine1);
```

```
ELSE
```

```
    INSERT INTO fine VALUES (roll, CURDATE(), 0);
```

```
END IF;
```

```
UPDATE borrower SET status = 'R' WHERE rollno = roll;
```

```
END $$
```

```
DELIMITER ;
```

```
-- Step 6: Call the Procedure for Each Borrower
```

```
CALL calc_fine_lib(1);
```

```
CALL calc_fine_lib(2);
```

```
CALL calc_fine_lib(3);
```

```
CALL calc_fine_lib(4);
```

```
CALL calc_fine_lib(5);
```

```
-- Step 7: Display Fine Table to Verify Results
```

```
SELECT * FROM fine;
```

```
-- Optional: Drop the database (uncomment if needed)
```

```
-- DROP DATABASE library;
```

```
-- *****
```

```
CALL p3(3);
```

```
SELECT * FROM n_rollcall;
```

```
-- OUTPUT:
```

```
-- +-----+-----+-----+
-- | roll_no | name   | address |
-- +-----+-----+-----+
-- | 4       | Kalpesh | Dhule   |
-- | 5       | Abhi   | Satara  |
-- +-----+-----+-----+
```

```
-- *****
```

```
INSERT INTO o_rollcall VALUES (6, 'Patil', 'Kolhapur');
```

```
CALL p3(4);
```

```
SELECT * FROM n_rollcall;
```

```
-- OUTPUT:
```

```
-- +-----+-----+-----+
-- | roll_no | name   | address |
-- +-----+-----+-----+
-- | 4       | Kalpesh | Dhule   |
-- | 5       | Abhi   | Satara  |
-- | 6       | Patil  | Kolhapur |
-- +-----+-----+-----+
```

```
-- *****
```