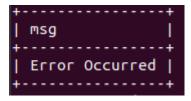
Assignment 4: PL/SQL

Roll No: 31448

```
1) Create Procedure
DELIMITER $$
CREATE OR REPLACE PROCEDURE Issue Book(
  IN p_roll_no INT,
  IN p_name VARCHAR(100),
  IN p_issue_date DATE,
  IN p_book_name VARCHAR(200)
)
BEGIN
  -- Error handler for SQL exceptions
  DECLARE EXIT HANDLER FOR SQLEXCEPTION
  BEGIN
    ROLLBACK;
    SELECT 'Error Occurred' AS msg;
  END;
  START TRANSACTION;
  INSERT INTO borrow(Roll_no, Name, Date_of_Issue, Name_of_Book, Status)
  VALUES (p_roll_no, p_name, p_issue_date, p_book_name, 'I');
  COMMIT;
  SELECT 'BOOK ISSUED SUCCESSFULLY' AS msg;
END $$
DELIMITER;
2) Call Procedure
CALL Issue_Book(201, 'Mokshada Sheth', '2025-08-05', 'Discovery of India');
CALL Issue_Book(201,'Mokshada Sheth','2025-08-05','Discovery of India');
CALL Issue_Book(202,'Sayali Pawar','2025-02-01','Diary of Anne Frank');
CALL Issue_Book(203,'Gauri Wagh','2025-06-01','It ends with us');
CALL Issue Book(204, 'Shradha Kokare', '2025-05-11', 'Biography of Kiran Bedi');
CALL Issue_Book(205,'Mayuri Sable','2025-03-21','The 5AM Club');
      msg
      BOOK ISSUED SUCCESSFULLY
```

3) Exception Handler

CALL Issue_Book('205','Mayuri Sable','2025-03-13','The Pysology of Money');



4) Display Records

SELECT * FROM borrow;

++	
201 2025-08-05 Discovery of India I Mokshad 202 2025-02-01 Diary of Anne Frank I Sayali 203 2025-06-01 It ends with us I Gauri W 204 2025-05-11 Biography of Kiran Bedi I Shradha 205 2025-03-21 The 5AM Club I Mayuri	Pawar lagh Kokare

5) Procedure to set fine if between 15 and 30 Rs 5/- per day. If >30 then Rs 50/- per day DELIMITER \$\$

MariaDB [te31448_db]> CREATE OR REPLACE PROCEDURE Return_Book(

- -> IN p_roll_no INT,
- -> IN p_return_date DATE)
- -> BEGIN
- -> DECLARE v_days INT;
- -> DECLARE v_issue_date DATE;
- -> DECLARE v_fine_amount DECIMAL(8,2);
- -> SELECT Date_of_Issue INTO v_issue_date FROM borrow WHERE Roll_no = p_roll_no;
- -> SET v days = DATEDIFF(p return date, v issue date);
- -> SET v_fine_amount = 0;
- -> IF v_days BETWEEN 15 AND 30 THEN
- -> SET v_fine_amount= (v_days-14)*5;
- -> ELSEIF v_days>30 THEN
- -> SET v_fine_amount= ((v_days-30)*50)+((v_days-14-(v_days-30))*5);
- \rightarrow -- fiine=(days beyond 30×50)+(days between 15 and 30×5)
- -> END IF:
- -> UPDATE borrow SET Status='R' WHERE Roll NO = p roll NO AND Status='I';
- -> IF v_fine_amount>0 THEN
- -> INSERT INTO fine(Roll_no,Fine_date,Amt)

VALUES(p_roll_no,p_return_date,v_fine_amount);

- -> END IF;
- -> SELECT CONCAT('Return Processed.Fine amount: Rs ',v_fine_amount) AS msg;
- -> END
- -> \$\$ DELIMITER

6) Call Return Book

-- No fine

CALL Return_Book(203,'2025-06-12');

```
msg |
Return Processed. Fine amount: Rs 0.00 |
```

-- days between 15-30

CALL Return_Book(204,'2025-05-30');

-- days >30

CALL Return_Book(205,'2025-04-30');

7) Status updated

SELECT * FROM borrow;

•	Date_of_Issue	+ Name_of_book -	+ Status	
202 203 204	2025-06-01 2025-05-11	Diary of Anne Frank It ends with us Biography of Kiran Bedi	R R	Mokshada Sheth Sayali Pawar Gauri Wagh Shradha Kokare Mayuri Sable

8) Fine table

SELECT * FROM fine;