CREATE TABLE borrower(Roll\_no INT PRIMARY KEY, Date\_of\_Issue DATE, Name\_of\_book VARCHAR(300), Status CHAR(1), Name VARCHAR(40));

desc borrower;

+---------------+--------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+---------------+--------------+------+-----+---------+-------+

| Roll\_no | int(11) | NO | PRI | NULL | |

| Date\_of\_Issue | date | YES | | NULL | |

| Name\_of\_book | varchar(300) | YES | | NULL | |

| Status | char(1) | YES | | NULL | |

| Name | varchar(40) | YES | | NULL | |

+---------------+--------------+------+-----+---------+-------+

5 rows in set (0.002 sec)

MariaDB [te31448\_db]> desc Fine;

+-----------+--------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-----------+--------------+------+-----+---------+-------+

| Roll\_no | int(11) | YES | | NULL | |

| Fine\_date | date | YES | | NULL | |

| Amt | decimal(8,2) | YES | | NULL | |

+-----------+--------------+------+-----+---------+-------+

3 rows in set (0.002 sec)

MariaDB [te31448\_db]> DELIMITER $$

MariaDB [te31448\_db]> 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

->

-> DECLARE EXIT HANDLER FOR SQLEXCEPTION

-> BEGIN

-> ROLLBACK;

-> SELECT 'Error Occurred' AS msg;

-> END;

-> START TRANSACTION;

-> INSERT INTO borrower(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 $$

Query OK, 0 rows affected (0.087 sec)

MariaDB [te31448\_db]> DELIMITER ;

MariaDB [te31448\_db]> CALL Issue\_Book(501,'Moksha','2025-6-3','5AM');

+--------------------------+

| msg |

+--------------------------+

| BOOK ISSUED SUCCESSFULLY |

+--------------------------+

1 row in set (0.024 sec)

Query OK, 1 row affected (0.025 sec)

MariaDB [te31448\_db]> CALL Issue\_Book(502,'Sakshi','2025-7-5','atomic habit');

+--------------------------+

| msg |

+--------------------------+

| BOOK ISSUED SUCCESSFULLY |

+--------------------------+

1 row in set (0.039 sec)

Query OK, 1 row affected (0.039 sec)

MariaDB [te31448\_db]> CALL Issue\_Book(503,'Sai','2025-7-8','habit');

+--------------------------+

| msg |

+--------------------------+

| BOOK ISSUED SUCCESSFULLY |

+--------------------------+

1 row in set (0.030 sec)

Query OK, 1 row affected (0.030 sec)

MariaDB [te31448\_db]> 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);

-> 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 $$

Query OK, 0 rows affected (0.098 sec)

MariaDB [te31448\_db]> 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 borrower 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);

-> 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 $$

Query OK, 0 rows affected (0.079 sec)