CREATE TABLE borrower(

roll\_no int,

name varchar(45),

Issue\_date date,

book\_name varchar(45),

status varchar(45)

);

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

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

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

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

| name | varchar(45) | YES | | NULL | |

| issue\_date | date | YES | | NULL | |

| book\_name | varchar(45) | YES | | NULL | |

| status | varchar(45) | YES | | NULL | |

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

CREATE TABLE fine(

rollno int,

fine\_date date,

amt int

);

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

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

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

| rollno | int(11) | YES | | NULL | |

| date | date | YES | | NULL | |

| amount | int(11) | YES | | NULL | |

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

INSERT INTO borrower(roll\_no, name, issue\_date, book\_name, status)

VALUES (10, "Amit", "2023-11-01", "Advanced C Programming", "returned"),

(11, "Neha", "2023-11-15", "Advanced DBMS", "returned"),

(12, "Ravi", "2023-11-05", "Data Structures and Algorithms", "returned"),

(13, "Sanya", "2023-11-10", "Programming in C - Updated", "returned"),

(14, "Ravi", "2023-11-20", "Mastering DSA with JAVA", "returned"),

(15, "Anil", "2023-11-25", "Computer Network Security", "returned");

MariaDB [te31252\_db]> select \* from borrower;

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

| roll\_no | name | issue\_date | book\_name | status |

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

| 10 | Amit | 2023-11-01 | Advanced C Programming | returned |

| 11 | Neha | 2023-11-15 | Advanced DBMS | returned |

| 12 | Ravi | 2023-11-05 | Data Structures and Algorithms | returned |

| 13 | Sanya | 2023-11-10 | Programming in C - Updated | returned |

| 14 | Ravi | 2023-11-20 | Mastering DSA with JAVA | returned |

| 15 | Anil | 2023-11-25 | Computer Network Security | returned |

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

6 rows in set (0.001 sec)

CREATE PROCEDURE calc\_fine(

-> roll\_new INT,

-> book\_name\_new VARCHAR(20)

-> )

-> BEGIN

-> DECLARE x INT;

-> DECLARE CONTINUE HANDLER FOR NOT FOUND

-> BEGIN

-> SELECT 'NOT FOUND';

-> END;

->

-> DECLARE EXIT HANDLER FOR 1452

-> BEGIN

-> SELECT 'Primary Key Not Found' AS ErrorMessage;

-> END;

->

-> SELECT DATEDIFF(CURDATE(), issue\_date) INTO x

-> FROM borrower

-> WHERE roll\_no = roll\_new AND book\_name = book\_name\_new;

->

-> -- Check for fine

-> IF x > 15 AND x <= 30 THEN

-> INSERT INTO fines(roll\_no, fine\_date, amt)

-> VALUES(roll\_new, CURDATE(), (x \* 5));

-> ELSEIF x > 30 THEN

-> INSERT INTO fines(roll\_no, fine\_date, amt)

-> VALUES(roll\_new, CURDATE(), (x \* 50));

-> END IF;

->

-> UPDATE borrower

-> SET status = 'returned'

-> WHERE roll\_no = roll\_new AND book\_name = book\_name\_new;

-> END $

call calc\_fine(11,'Advanced DBMS');

MariaDB [te31252\_db]> select \* from fine;$

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

| rollno | fine\_date | amt |

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

| 11 | 2024-08-28 | 14350 |

| 11 | 2024-08-28 | 14350 |

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

select \*from borrowers;

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

| roll\_no | name | issue\_date | book\_name | status |

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

| 1 | Amit | 2023-10-31 | Advanced C Programming | I |

| 2 | Neha | 2023-10-17 | Advanced DBMS | returned |

| 3 | Ravi | 2023-10-18 | Data Structures and Algorithms| I |

| 4 | Sanya | 2023-10-16 | Programming in C - Updated | I |

| 5 | Ravi | 2023-10-01 | Mastering DSA with JAVA | I |

| 6 | Anil | 2023-10-10 | Computer Network Security | I |

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

call procedure calc\_fine(9999,’java’);

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

| Primary Key Not Found |

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