**DBMS ASSIGMENT 5**

mysql> use assignment5;

Database changed

mysql> show tables;

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

| Tables\_in\_assignment5 |

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

| borrower |

| fine |

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

2 rows in set (0.00 sec)

mysql> DELIMITER //

mysql>

mysql> CREATE PROCEDURE calfine(rolln INTEGER, bookn VARCHAR(30))

-> BEGIN

-> DECLARE no\_of\_days INTEGER;

-> DECLARE fine\_amount INTEGER;

-> DECLARE date1 DATE;

->

-> SELECT dateofissue INTO date1

-> FROM borrower

-> WHERE roll\_no = rolln AND nameofbook = bookn;

-> SET no\_of\_days = DATEDIFF(CURDATE(), date1);

-> IF no\_of\_days > 15 AND no\_of\_days < 30 THEN

-> SET fine\_amount = (no\_of\_days - 15) \* 5;

-> END IF;

-> IF no\_of\_days > 30 THEN

-> SET fine\_amount = ((15 \* 5) + ((no\_of\_days - 30) \* 50));

-> END IF;

-> SELECT CONCAT('Fine is: ', fine\_amount);

-> IF fine\_amount > 0 THEN

-> INSERT INTO fine (roll\_no, f\_date, amount)

-> VALUES (rolln, CURDATE(), fine\_amount);

-> UPDATE borrower

-> SET status = 'R'

-> WHERE roll\_no = rolln;

-> END IF;

-> END //

Query OK, 0 rows affected (0.01 sec)

mysql>

mysql> DELIMITER ;

mysql> call calfine(101, 'Introduction to Algorithms');

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

| CONCAT('Fine is: ', fine\_amount) |

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

| Fine is: 18575 |

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

1 row in set (0.00 sec)

Query OK, 1 row affected (0.01 sec)

mysql> select \* from fine;

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

| Roll\_no | f\_date | amount |

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

| 101 | 2025-03-07 | 18575.00 |

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

1 row in set (0.00 sec)

mysql> call calfine(102, 'Database Management System');

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

| CONCAT('Fine is: ', fine\_amount) |

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

| NULL |

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

1 row in set (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

mysql> call calfine(102, 'Database Management Systems');

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

| CONCAT('Fine is: ', fine\_amount) |

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

| Fine is: 18375 |

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

1 row in set (0.00 sec)

Query OK, 1 row affected (0.00 sec)

mysql> select \* from fine;

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

| Roll\_no | f\_date | amount |

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

| 101 | 2025-03-07 | 18575.00 |

| 102 | 2025-03-07 | 18375.00 |

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

2 rows in set (0.00 sec)

mysql> call calfine(103, 'Operating System Concepts');

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

| CONCAT('Fine is: ', fine\_amount) |

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

| Fine is: 18125 |

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

1 row in set (0.00 sec)

Query OK, 1 row affected (0.00 sec)

mysql> select \* from fine;

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

| Roll\_no | f\_date | amount |

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

| 101 | 2025-03-07 | 18575.00 |

| 102 | 2025-03-07 | 18375.00 |

| 103 | 2025-03-07 | 18125.00 |

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

3 rows in set (0.00 sec)

mysql> select \* from borrower;

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

| Roll\_no | S\_Name | DateOfIssue | NameofBook | status |

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

| 101 | Aarav Patil | 2024-02-01 | Introduction to Algorithms | R |

| 102 | Rohan Sharma | 2024-02-05 | Database Management Systems | R |

| 103 | Sneha Joshi | 2024-02-10 | Operating System Concepts | R |

| 104 | Meera Desai | 2024-02-15 | Artificial Intelligence | I |

| 105 | Kunal More | 2024-02-20 | Computer Networks | I |

| 106 | Pooja Chavan | 2024-02-25 | Software Engineering | I |

| 107 | Aditya Naik | 2024-03-01 | Data Structures and Algorithms | I |

| 108 | Priya Kulkarni | 2024-03-05 | Machine Learning | I |

| 109 | Varun Gokhale | 2024-03-10 | Cyber Security | I |

| 110 | Ananya Bhatt | 2024-03-15 | Cloud Computing | I |

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

10 rows in set (0.00 sec)

mysql>