**31253 – Assignment 4**

1. Check the number of days (from date of issue), if days are between 15 to 30 then fine will be Rs 5 per day. If no. of days > 30, per day fine will be Rs 50 per day &amp; for days less than 30, Rs. 5 per day. After submitting the book, status will change from I to R. If the condition of fine is true, then details will be stored into the fine table.

Borrower = B

Fine = F;

**select\*from B;**

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

| roll | name | idate | book | status |

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

| 201 | Rahul Sharma | 2023-08-10 | The God of Small Things | I |

| 202 | Priya Patel | 2023-08-09 | Midnight's Children | I |

| 203 | Amit Kumar | 2023-08-08 | The Namesake | I |

| 204 | Sneha Gupta | 2023-08-07 | A Suitable Boy | I |

| 205 | Rajiv Verma | 2023-08-06 | Interpreter of Maladies | I |

| 206 | Anjali Singh | 2023-08-05 | The White Tiger | I |

| 207 | Vikram Chatterjee | 2023-08-04 | Train to Pakistan | I |

| 208 | Neha Sharma | 2023-08-03 | Inheritance of Loss | I |

| 209 | Arun Khanna | 2023-08-02 | The Inscrutable Americans | I |

| 210 | Meera Patel | 2023-08-01 | Shantaram | I |

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

**describe F;**

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

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

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

| roll | int | YES | MUL | NULL | |

| rdate | date | YES | | NULL | |

| amt | int | YES | | NULL | |

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

**delimiter //**

**CREATE PROCEDURE GetInfo2(IN roll\_input INT, IN date\_input DATE)**

-> BEGIN

-> DECLARE issue\_date DATE;

-> DECLARE temp INT;

-> DECLARE amount INT;

->

-> DECLARE Book\_Exception CONDITION FOR SQLSTATE '45000';

->

-> SELECT idate INTO issue\_date FROM B WHERE roll = roll\_input;

-> SET temp = DATEDIFF(date\_input, issue\_date);

->

-> IF roll\_input < 201 OR roll\_input > 210 THEN

-> SIGNAL Book\_Exception SET MESSAGE\_TEXT = 'Enter valid roll number!';

-> END IF;

->

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

-> SET amount = temp \* 5;

-> ELSE

-> SET amount = temp \* 50;

-> END IF;

->

-> INSERT INTO F (roll, rdate, amt) VALUES (roll\_input, issue\_date, amount);

-> UPDATE B SET status = 'R' WHERE roll = roll\_input;

->

-> SELECT 'Fine calculated and borrower status updated' AS Message;

-> END;

-> //

**call GetInfo2(201, '2023-08-20');**

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

| Message |

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

| Fine calculated and borrower status updated |

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

**select\*from B;**

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

| roll | name | idate | book | status |

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

| 201 | Rahul Sharma | 2023-08-10 | The God of Small Things | R |

| 202 | Priya Patel | 2023-08-09 | Midnight's Children | I |

| 203 | Amit Kumar | 2023-08-08 | The Namesake | I |

| 204 | Sneha Gupta | 2023-08-07 | A Suitable Boy | I |

| 205 | Rajiv Verma | 2023-08-06 | Interpreter of Maladies | I |

| 206 | Anjali Singh | 2023-08-05 | The White Tiger | I |

| 207 | Vikram Chatterjee | 2023-08-04 | Train to Pakistan | I |

| 208 | Neha Sharma | 2023-08-03 | Inheritance of Loss | I |

| 209 | Arun Khanna | 2023-08-02 | The Inscrutable Americans | I |

| 210 | Meera Patel | 2023-08-01 | Shantaram | I |

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

**mysql> select\*from F;**

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

| roll | rdate | amt |

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

| 201 | 2023-08-10 | 500 |

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

**call GetInfo2(230, '2023-08-20');**

ERROR 1644 (45000): Enter valid roll number!

**call GetInfo2(205, '2023-08-30');**

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

| Message |

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

| Fine calculated and borrower status updated |

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

**select\*from B;**

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

| roll | name | idate | book | status |

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

| 201 | Rahul Sharma | 2023-08-10 | The God of Small Things | R |

| 202 | Priya Patel | 2023-08-09 | Midnight's Children | I |

| 203 | Amit Kumar | 2023-08-08 | The Namesake | I |

| 204 | Sneha Gupta | 2023-08-07 | A Suitable Boy | I |

| 205 | Rajiv Verma | 2023-08-06 | Interpreter of Maladies | R |

| 206 | Anjali Singh | 2023-08-05 | The White Tiger | I |

| 207 | Vikram Chatterjee | 2023-08-04 | Train to Pakistan | I |

| 208 | Neha Sharma | 2023-08-03 | Inheritance of Loss | I |

| 209 | Arun Khanna | 2023-08-02 | The Inscrutable Americans | I |

| 210 | Meera Patel | 2023-08-01 | Shantaram | I |

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

**select\*from F;**

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

| roll | rdate | amt |

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

| 201 | 2023-08-10 | 500 |

| 205 | 2023-08-06 | 120 |

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