ASSINMENT - A4

Unnamed PL/SQLcode block: Use of Control structure and Exception handling is mandatory. Suggested Problem statement: Consider Tables:
A. Borrower (Roll_no, Name, Date_of_Issue, Name_of_Book, Status)
B. Fine (Roll_no, Date, Amt)
1. Accept Roll_no and Name_of_Book from user.
2. Check the number of days (from Date_of_Issue).
3. If days are between 15 to 30 then fine amount will be Rs 5per day.
4. If no. of days>30, per day fine will be Rs 50 per day and for days less than 30, Rs. 5 per day.
5. After submitting the book, status will change from I to R.
6. If condition of fine is true, then details will be stored into fine table
7. Also handles the exception by named exception handler or user define exception handler.

```
SQL> CREATE TABLE  borrower(roll_no NUMBER , name VARCHAR2(25), dateofissue
DATE,name_of_book VARCHAR2(30), status VARCHAR2(20));

Table created.


SQL> CREATE TABLE fine(roll_no NUMBER,date_of_return DATE,amt NUMBER);

Table created.

SQL> INSERT INTO borrower
VALUES(11,'ANJALI',TO_DATE('01-08-2023','DD-MM-YYYY'),'OPERATING
SYSTEM','ISSUED');

1 row created.

SQL> INSERT INTO borrower
VALUES(12,'HARSHADA',TO_DATE('15-10-2023','DD-MM-YYYY'),'DATA
STRUCTURE','ISSUED');

1 row created.

SQL> INSERT INTO borrower
VALUES(13,'AJAY',TO_DATE('24-08-2023','DD-MM-YYYY'),'DATABASE MANAGEMENT
SYSTEM','ISSUED');

1 row created.

SQL> INSERT INTO borrower
VALUES(14,'ABHISHEK',TO_DATE('26-08-2023','DD-MM-YYYY'),'COMPUTER
NETWORK','ISSUED');

1 row created.

SQL> INSERT INTO borrower
VALUES(15,'JECITA',TO_DATE('09-09-2023','DD-MM-YYYY'),'DISCRETE
MATHEMATICS','ISSUED');
```

```
1 row created.

SQL> SET SERVEROUT ON
SQL> SET VERIFY OFF
SQL> DECLARE
  2  i_roll_no NUMBER;
  3  name_of_book VARCHAR2(25);
  4  no_of_days NUMBER;
  5  return_date DATE := TO_DATE(SYSDATE,'DD-MM-YYYY');
  6  temp NUMBER;
  7  doi DATE;
  8  fine NUMBER;
  9  BEGIN
 10  i_roll_no := &i_roll_no;
 11  name_of_book := '&nameofbook';
 12  SELECT to_date(borrower.dateofissue,'DD-MM-YYYY') INTO doi FROM borrower
WHERE borrower.roll_no = i_roll_no AND borrower.name_of_book = name_of_book;
 13  no_of_days := return_date-doi;
 14  dbms_output.put_line(no_of_days);
 15  IF (no_of_days >15 AND no_of_days <=30) THEN
 16  fine := 5*no_of_days;
 17  ELSIF (no_of_days>30 ) THEN
 18  temp := no_of_days-30;
 19  fine := 150 + temp*50;
 20  END IF;
 21  dbms_output.put_line(fine);
 22  INSERT INTO fine VALUES(i_roll_no,return_date,fine);
 23  UPDATE borrower SET status = 'RETURNED' WHERE borrower.roll_no = i_roll_no;
 24  END;
 25  /
Enter value for i_roll_no: 12
Enter value for nameofbook: DATA STRUCTURE
62
1750

PL/SQL procedure successfully completed.

SQL> select * from borrower;

   ROLL_NO NAME                      DATEOFISSUE        NAME_OF_BOOK
 STATUS
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        11 ANJALI                   01-AUG-23          OPERATING SYSTEM
 ISSUED

        12 HARSHADA                 15-AUG-23          DATA STRUCTURE
 RETURNED

        13 AJAY                     24-AUG-23          DATABASE MANAGEMENT
SYSTEMISSUED

        14 ABHISHEK                 26-AUG-23          COMPUTER NETWORK
 ISSUED
```

```
        15 JECITA                    09-SEP-23          DISCRETE MATHEMATICS
 ISSUED


SQL> select * from fine;

   ROLL_NO DATE_OF_RETURN            AMT
---------- ------------------ ----------
        12 16-OCT-23               1750
```