

ASSIGNMENT NO-4A

Title: Unnamed PL/SQL code block: Use of Control structure and Exception handling is mandatory.

Suggested Problem statement:

Consider Tables:

1. Borrower(Roll_no, Name, DateofIssue, NameofBook, Status)

2.Fine(Roll_no,Date,Amt)

Accept Roll_no and NameofBook from user.

Check the number of days (from date of issue).

If days are between 15 to 30 then fine amount will be Rs 5per day.

If no. of days>30, per day fine will be Rs 50 per day and for days less than 30, Rs. 5 per day.

After submitting the book, status will change from I to R.

If condition of fine is true, then details will be stored into fine table.

Also handles the exception by named exception handler or user define exception handler.

Step 1:

```
CREATE TABLE borrower1(roll_no NUMBER , name VARCHAR(25), dateofissue DATE,name_of_book VARCHAR(25), status VARCHAR(20));
```

```
CREATE TABLE fine1(roll_no NUMBER,date_of_return DATE,amt NUMBER);
```

```
INSERT INTO borrower1 VALUES(45,'Tanuja',TO_DATE('01-08-2023','DD-MM-YYYY'),'DBMS','PENDING');
```

```
INSERT INTO borrower1 VALUES(46,'Rajnandini',TO_DATE('15-04-2024','DD-MM-YYYY'),'TOC','PENDING');
```

```
INSERT INTO borrower1 VALUES(47,'Vanita',TO_DATE('24-03-2024','DD-MM-YYYY'),'PHP','PENDING');
```

```
INSERT INTO borrower1 VALUES(48,'Sakshi',TO_DATE('26-07-2022','DD-MM-YYYY'),'JAVA','PENDING');
```

```
INSERT INTO borrower1 VALUES(49,'Rutuja',TO_DATE('09-05-2024','DD-MM-YYYY'),'SPOS','PENDING');
```

Step 2:

```
SQL> DECLARE
```

```
2   i_roll_no NUMBER;
```

```
3   name_of_book VARCHAR(25);
```

```
4   no_of_days NUMBER;
```

```
5   return_date DATE := TO_DATE(SYSDATE,'DD-MM-YYYY');
```

```
6   temp NUMBER;
```

```
7   doi DATE;
```

```
8   fine1 NUMBER;
```

```
9 BEGIN
```

```
10  i_roll_no := '&i_roll_no';
```

```
11  name_of_book := '&nameofbook';
```

```
12  --dbms_output.put_line(return_date);
```

```

13  SELECT to_date(borrower1.dateofissue,'DD-MM-YYYY') INTO doi FROM
borrower1 WHERE borrower1.roll_no = i_roll_no AND borrower1.name_of_book =
name_of_book;
14  no_of_days := return_date-doi;
15  dbms_output.put_line(no_of_days);
16  IF (no_of_days >15 AND no_of_days <=30) THEN
17      fine1 := 5*no_of_days;
18
19  ELSIF (no_of_days>30 ) THEN
20      temp := no_of_days-30;
21      fine1 := 150 + temp*50;
22  END IF;
23  dbms_output.put_line(fine1);
24  INSERT INTO fine1 VALUES(i_roll_no,return_date,fine1);
25  UPDATE borrower1 SET status = 'RETURNED' WHERE borrower1.roll_no =
i_roll_no;
26
27
28  END;
29  /

```

Enter value for i_roll_no: 45

Enter value for nameofbook: DBMS

select * from borrower1;

ROLL_NO	NAME	DATEOFISS	NAME_OF_BOOK	STATUS
45	Tanuja	01-AUG-23	DBMS	RETURNED
46	Rajnandini	15-APR-24	TOC	PENDING
47	Vanita	24-MAR-24	PHP	PENDING
48	Sakshi	26-JUL-22	JAVA	PENDING
49	Rutuja	09-MAY-24	SPOS	PENDING

SQL> select * from fine1;

ROLL_NO	DATE_OF_R	AMT
45	30-SEP-24	19950