

Practical No 05

Problem Statement :- Unnamed PL/SQL code blocks: Use of control structure and exception handling is mandatory.

Write PL/SQL block of code for the following requirements:

Schema:-

1) Borrower(Rollin, Name, DateofIssue, NameofBook, Status)

2) Fine(Roll_no, Date, Amt)

*Accept roll_no & name of the book from user.

*Check the number of days (from date of issue), if days are between 15 to 30 then fine amount will be Rs 5 per day.

*If no. of days > 30, per day fine will be Rs 50 per day & 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.

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SQL> connect

Enter user-name: system

Enter password:

Connected.

SQL> create table borrower(Rollin NUMBER, Name VARCHAR(20), DateofIssue VARCHAR(20), NameofBook VARCHAR(20), status VARCHAR(2), PRIMARY KEY(Rollin));

Table created.

SQL> create table Fine(Roll_no NUMBER, Date DATE, Amt

NUMBER); Table created.

SQL> insert into borrower values(1, 'Asha', '01-Nov-2021', 'ML', 'I');

1 row created.

SQL> insert into borrower values(2, 'Bhushan', '05-Nov-2021', 'AI', 'I');

1 row created.

```
SQL> insert into borrower values(3,'Sayaji','10-Nov-2021','CNS','I');
```

1 row created.

```
SQL> insert into borrower values(4,'Pravin','15-Nov-2021','PPL','I');
```

1 row created.

```
SQL> select * from borrower;
```

ROLLIN NAME	DATEOFISSUE	NAMEOFBOOK	ST
1 Asha	01-Nov-2021	ML	I
2 Bhushan	05-Nov-2021	AI	I
3 Sayaji	10-Nov-2021	CNS	I
4 Pravin	15-Nov-2021	PPL	I

```
SQL> DECLARE
```

```
2 rno NUMBER(3) := '&Rollin';
```

```
3 bname VARCHAR(20) := '&Book_name';
```

```
4 no_days NUMBER(7);
```

```
5 issuedate DATE;
```

```
6 fineamt NUMBER(5) := 0;
```

```
7 BEGIN
```

```
8 select DateofIssue into issuedate from borrower where Rollin = rno;
```

```
9 select sysdate - to_date(issuedate) days into no_days from dual;
```

```
10 if(no_days >= 15 and no_days <=30) then
```

```
11 fineamt := no_days * 5;
```

```
12 elsif no_days > 30 then
```

```
13 fineamt := no_days * 50;
```

```
14 end if;
```

```
15 update borrower set status = 'R' where Rollin = rno;
```

```
16 if fineamt >=0 then
```

```
17 insert into Fine values(rno,sysdate,fineamt);
```

```
18 end if;
```

```
19 EXCEPTION
```

```
20 WHEN no_data_found THEN
```

```
21 dbms_output.put_line('Record not found');
```

```
22 END;
```

```
23 /
```

```
Enter value for rollin: 1
```

```
old 2: rno NUMBER(3) := '&Rollin';
```

```
new 2: rno NUMBER(3) := '1';
```

```
Enter value for book_name: ML
```

```
old 3: bname VARCHAR(20) :=
```

```
'&Book_name'; new      3: bname VARCHAR(20)
:= 'ML';
```

PL/SQL procedure successfully completed.

```
SQL> DECLARE
  2  rno NUMBER(3) := '&Rollin';
  3  bname VARCHAR(20) := '&Book_name';
  4  no_days NUMBER(7);
  5  issuedate DATE;
  6  fineamt NUMBER(5) := 0;
  7  BEGIN
  8  select DateofIssue into issuedate from borrower where Rollin = rno;
  9  select sysdate - to_date(issuedate) days into no_days from dual;
 10  if(no_days >= 15 and no_days <=30) then
 11  fineamt := no_days * 5;
 12  elsif no_days > 30 then
 13  fineamt := no_days * 50;
 14  end if;
 15  update borrower set status = 'R' where Rollin = rno;
 16  if fineamt >=0 then
 17  insert into Fine values(rno,sysdate,fineamt);
 18  end if;
 19  EXCEPTION
 20  WHEN no_data_found THEN
 21  dbms_output.put_line('Record not found');
 22  END;
 23 /
```

Enter value for rollin: 3

old 2: rno NUMBER(3) := '&Rollin';

new 2: rno NUMBER(3) := '3';

Enter value for book_name: CNS

old 3: bname VARCHAR(20) :=
'&Book_name'; new 3: bname VARCHAR(20)
:= 'CNS';

PL/SQL procedure successfully completed.

```
SQL> select * from Fine;
```

ROLLIN	DATE1	AMT
_____	-	_____

1	20-NOV-21	100
3	20-NOV-21	0