**PL/SQL Library Management**

**CODE –**

declare

r number(20);

bn varchar(50);

amt number(6,2) := 0;

rd DATE;

id DATE;

day number(20);

begin

r := &r;

bn := '&bn';

select DOI into id from Borrower where R\_no = r and NOB = bn and status = '1';

rd := sysdate;

day := rd - id;

if day <= 15 then

amt := 0;

dbms\_output.put\_line('No Fine');

elsif day > 15 and day <= 30 then

amt := (day - 15) \* 5;

else

amt := (15 \* 5)+((day - 30) \* 50);

end if;

UPDATE Borrower set status = 'R' where R\_no = r and NOB = bn;

if amt > 0 then

insert into Fine values(r, rd, amt);

dbms\_output.put\_line('Fine = Rs. ' || amt);

end if;

exception

when no\_data\_found then

dbms\_output.put\_line('No record found or book already returned');

end;

/

**OUTPUT –**

SQL\*Plus: Release 21.0.0.0.0 - Production on Mon Sep 29 18:55:54 2025

Version 21.3.0.0.0

Copyright (c) 1982, 2021, Oracle. All rights reserved.

Enter user-name: system

Enter password:

Last Successful login time: Mon Sep 29 2025 18:55:47 +05:30

Connected to:

Oracle Database 21c Express Edition Release 21.0.0.0.0 - Production

Version 21.3.0.0.0

SQL> create table Borrower(R\_no int,B\_name varchar(50),DOI DATE,NOB varchar(50),Status char(1));

Table created.

SQL> select sysdate from dual;

SYSDATE

---------

29-SEP-25

SQL> desc Borrower;

Name Null? Type

----------------------------------------- -------- ----------------------------

R\_NO NUMBER(38)

B\_NAME VARCHAR2(50)

DOI DATE

NOB VARCHAR2(50)

STATUS CHAR(1)

SQL> alter table Borrower add PRIMARY KEY(R\_no);

Table altered.

SQL> insert into Borrower(R\_no,B\_name,DOI,NOB,status) values(&R\_no,'&B\_name','&DOI','&NOB','&status');

Enter value for r\_no: 101

Enter value for b\_name: Aman

Enter value for doi: 01-Jun-25

Enter value for nob: TOC

Enter value for status: 1

old 1: insert into Borrower(R\_no,B\_name,DOI,NOB,status) values(&R\_no,'&B\_name','&DOI','&NOB','&status')

new 1: insert into Borrower(R\_no,B\_name,DOI,NOB,status) values(101,'Aman','01-Jun-25','TOC','1')

1 row created.

SQL> insert into Borrower(R\_no,B\_name,DOI,NOB,status) values(&R\_no,'&B\_name','&DOI','&NOB','&status');

Enter value for r\_no: 102

Enter value for b\_name: Raj

Enter value for doi: 22-Jul-25

Enter value for nob: DBMS

Enter value for status: 1

old 1: insert into Borrower(R\_no,B\_name,DOI,NOB,status) values(&R\_no,'&B\_name','&DOI','&NOB','&status')

new 1: insert into Borrower(R\_no,B\_name,DOI,NOB,status) values(102,'Raj','22-Jul-25','DBMS','1')

1 row created.

SQL> insert into Borrower values(103,'Harsh','10-Aug-25','IOT','1');

1 row created.

SQL> create table Fine(R\_no Int,ret\_date DATE,Amt Number(6,2));

Table created.

SQL> select \* from Borrower;

R\_NO B\_NAME DOI

---------- -------------------------------------------------- ---------

NOB S

-------------------------------------------------- -

101 Aman 01-JUN-25

TOC 1

102 Raj 22-JUL-25

DBMS 1

103 Harsh 10-AUG-25

IOT 1

SQL> insert into Fine values(101,'25-Jun-25',200);

1 row created.

SQL> insert into Fine values(102,'22-Aug-25',100);

1 row created.

SQL> insert into Fine values(103,'30-Aug-25',100);

1 row created.

SQL> set serveroutput on;

SQL> select \* from Fine;

R\_NO RET\_DATE AMT

---------- --------- ----------

101 25-JUN-25 200

102 22-AUG-25 100

103 30-AUG-25 100

SQL> @C:\Users\RITESH\Desktop\DBMS\Book.sql

Enter value for r: 101

old 9: r := &r;

new 9: r := 101;

Enter value for bn: TOC

old 10: bn := '&bn';

new 10: bn := 'TOC';

Fine = Rs. 4625

PL/SQL procedure successfully completed.

SQL> @C:\Users\RITESH\Desktop\DBMS\Book.sql

Enter value for r: 102

old 9: r := &r;

new 9: r := 102;

Enter value for bn: DBMS

old 10: bn := '&bn';

new 10: bn := 'DBMS';

Fine = Rs. 1125

PL/SQL procedure successfully completed.

SQL> @C:\Users\RITESH\Desktop\DBMS\Book.sql

Enter value for r: 103

old 9: r := &r;

new 9: r := 103;

Enter value for bn: IOT

old 10: bn := '&bn';

new 10: bn := 'IOT';

Fine = Rs. 2075

PL/SQL procedure successfully completed.

SQL> select \* from Fine;

R\_NO RET\_DATE AMT

---------- --------- ----------

101 25-JUN-25 200

102 22-AUG-25 100

103 30-AUG-25 100

101 29-SEP-25 4625

102 29-SEP-25 1125

103 29-SEP-25 2075

6 rows selected.

SQL> select \* from Borrower;

R\_NO B\_NAME DOI

---------- -------------------------------------------------- ---------

NOB S

-------------------------------------------------- -

101 Aman 01-JUN-25

TOC R

102 Raj 22-JUL-25

DBMS R

103 Harsh 10-AUG-25

IOT R