**Name – Shahane Akash Dilip Roll No – C32260 Class – TE Div:2**

**Batch – T8 Subject - DBMS**

**Assignment No – 4**

**Title:** Unnamed PL/SQL code block:

Use of control structure and exception handling is mandatory. **Suggested problem statement:**

a. Accept Roll\_no and NameofBook from user.

b. Check the number of days(from date and time).

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

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

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

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

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

**----------------------------------------------------------------**

**Consider Tables:**

**1. Borrower (Roll no, Name, DateofIssue, NameofBook, Status)**

SQL> CREATE TABLE borrower\_t7(roll\_no int, name varchar(20), date\_of\_i date, b\_name varchar(20), status varchar(10));

SQL>desc borrower\_t7;

|  |  |  |
| --- | --- | --- |
| Column | Null? | Type |
| ROLL | - | NUMBER |
| NAME | - | VARCHAR2(20) |
| DATE\_OF\_I | - | DATE |
| B\_NAME | - | VARCHAR2(20) |
| STATUS | - | VARCHAR2(10) |

**2. Fine (Roll\_no, Date, Amt)**

SQL>CREATE TABLE fine\_t7(roll\_no int, date\_of\_fine date, amt int);

SQL>desc fine\_t7;

|  |  |  |
| --- | --- | --- |
| Column | Null? | Type |
| ROLL | - | NUMBER |
| SYS\_DATE | - | DATE |
| FINE\_AMT | - | NUMBER |

SQL> insert into borrower\_t7 values(1,'harsh','12-06-2017','harry potter','i'); 1 row created.

SQL> insert into borrower\_t7 values(2,'sandesh','15-06-2017','iceage','r');

1 row created.

SQL> select \* from borrower\_t7;

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

| Roll\_NO | Name | date\_of\_i | b\_name | status|

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

| 1 | harsh | 12-06-17 | harry potter| i |

| 2 | sandesh | 12-06-17 | iceage | r |

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

SQL> insert into borrower\_t7 values(3,'Rahul','25-07-2017','pokemon','i'); 1 row created.

SQL> insert into borrower\_t7 values(4,'sarvesh','20-04-2017','duel','r');

1 row created.

SQL> insert into borrower\_t7 values(5,'ishwari','22-05-2017','hindikatha','i');

1 row created.

SQL> select \* from borrower\_t7;

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

| ROLL\_NO | NAME | DATE\_OF\_I | NAME\_OF\_BOOK | STATUS |

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

| 1 | harsh | 12-06-17 | harry potter | i |

| 2 | sandesh | 15-06-17 | iceage | r |

| 3 | Rahul | 25-07-17 | pokemon | i |

| 4 | sarvesh | 20-04-17 | duel | r |

| 5 | ishwari | 22-05-17 | hindikatha | i |

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declare

roll int:=&roll\_number;

b\_name varchar(20):='&bookname';

mdays int:=0; ndays date; fine\_amt int:=0; begin

select date\_of\_i into ndays from borrower\_t7 where roll\_no=roll and name\_of\_book=b\_name; mdays:=sysdate-ndays; if mdays>=15 and mdays<30 then fine\_amt:=(mdays-15)\*5; elsif mdays>=30 then fine\_amt:=15\*5+(mdays-30)\*50; end if;

update borrower\_t7 set status='r' where roll\_no=roll and name\_of\_book=b\_name; if fine\_amt>0 then

insert into fine\_t7 values(roll,sysdate,fine\_amt); end if; exception

when no\_data\_found then dbms\_output.put\_line('No data found'); when others then

dbms\_output.put\_line('Exception occurred'); end;

/

SQL>select \* from fine\_t7;

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

| ROLL\_NO | DATE\_OF\_fine | AMT |

|---------|---------------|-----|

| 3 | 23-08-17 | 75 |

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SQL> select \* from borrower\_t7;

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

| ROLL\_NO | NAME | DATE\_OF\_I | NAME\_OF\_BOOK | STATUS |

|---------|----------|--------------|--------------|--------|

| 1 | harsh | 12-06-17 | harry potter | i |

| 2 | sandesh | 15-06-17 | iceage | r |

| 3 | Rahul | 25-07-17 | pokemon | r |

| 4 | sarvesh | 20-04-17 | duel | r |

| 5 | ishwari | 22-05-17 | hindikatha | i |

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