

1. Create table Borrower and Fine.

```
SQL> CREATE TABLE Borrower (Roll NUMBER, SName VARCHAR2(10), DateOfIssue
DATE, BookName VARCHAR2(15), Status VARCHAR2(1));
```

Table created.

```
SQL> CREATE TABLE Fine (Roll NUMBER, CurrentDate DATE, Amt NUMBER);
```

Table created.

2. Insert 5 records in Borrower table.

```
SQL> INSERT INTO Borrower VALUES (1, 'ajay', '09-JUN-17', 'book1', 'I');
```

1 row created.

```
SQL> INSERT INTO Borrower VALUES (2, 'vijay', '23-NOV-18', 'book2', 'I');
```

1 row created.

```
SQL> INSERT INTO Borrower VALUES (3, 'vishal', '30-DEC-19', 'book3', 'I');
```

1 row created.

```
SQL> INSERT INTO Borrower VALUES (4, 'suresh', '15-JAN-20', 'book4', 'I');
```

1 row created.

```
SQL> INSERT INTO Borrower VALUES (5, 'karan', '20-FEB-21', 'book5', 'I');
```

1 row created.

3. Display structure and records of both tables.

```
SQL> DESC Borrower;
```

Name	Null?	Type
ROLL		NUMBER
SNAME		VARCHAR2(10)
DATEOFISSUE		DATE
BOOKNAME		VARCHAR2(15)
STATUS		VARCHAR2(1)

```
SQL> DESC Fine;
```

Name	Null?	Type
ROLL		NUMBER
CURRENTDATE		DATE
AMT		NUMBER

```
SQL> SELECT * FROM Borrower;
```

ROLL	SNAME	DATEOFISS	BOOKNAME	S
1	ajay	09-JUN-17	book1	I
2	vijay	23-NOV-18	book2	I
3	vishal	30-DEC-19	book3	I
4	suresh	15-JAN-20	book4	I
5	karan	20-FEB-21	book5	I

```
SQL> SELECT * FROM Fine;
```

no rows selected

3. Write PL/SQL block using exception handling.

SQL> edit first.sql

```
DECLARE
    e1 EXCEPTION;
    rollno Borrower.Roll%TYPE;
    bname Borrower.BookName%TYPE;
    B_Issue_Date DATE;
    Days NUMBER(4);
    fine_amt NUMBER(10);
BEGIN
    rollno := &rollno;
    bname := '&bname';

    SELECT DateOfIssue INTO B_Issue_Date
    FROM Borrower
    WHERE Roll = rollno AND BookName = bname;

    Days := SYSDATE - B_Issue_Date;
    DBMS_OUTPUT.PUT_LINE('Total Days: ' || Days);

    IF Days <= 15 THEN
        fine_amt := 0;
        DBMS_OUTPUT.PUT_LINE('No fine.....');
    ELSIF Days BETWEEN 16 AND 30 THEN
        fine_amt := (Days - 15) * 5;
        INSERT INTO Fine VALUES (rollno, SYSDATE, fine_amt);
    ELSE
        fine_amt := (Days - 30) * 50 + (15 * 5);
        INSERT INTO Fine VALUES (rollno, SYSDATE, fine_amt);
    END IF;

    UPDATE Borrower SET Status = 'R' WHERE Roll = rollno;

EXCEPTION
    WHEN NO_DATA_FOUND THEN
        DBMS_OUTPUT.PUT_LINE('Record not found');
    WHEN OTHERS THEN
        DBMS_OUTPUT.PUT_LINE('An error occurred: ' || SQLERRM);
END;
/
```

```
SQL> @first
Enter value for rollno: 2
old 9: rollno := &rollno;
new 9: rollno := 2;
Enter value for bname: book2
old 10: bname := '&bname';
new 10: bname := 'book2';
```

PL/SQL procedure successfully completed.

SQL> SELECT \* FROM Fine;

ROLL	CURRENTDA	AMT
2	19-SEP-24	104975

```
SQL> @first
Enter value for rollno: 4
old 9: rollno := &rollno;
```

```
new 9:      rollno := 4;
Enter value for bname: book4
old 10:      bname := '&bname';
new 10:      bname := 'book4';
```

PL/SQL procedure successfully completed.

```
SQL> SELECT * FROM Fine;
```

ROLL	CURRENTDA	AMT
2	19-SEP-24	104975
4	19-SEP-24	84075