

## DBMS Practical 4 Program Code for Oracle10g:

```
CREATE TABLE borrower(roll_no NUMBER , name VARCHAR2(25), dateofissue  
DATE,name_of_book VARCHAR2(25), status VARCHAR2(20));
```

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

```
INSERT INTO borrower  
VALUES(1,'ASHUTOSH',TO_DATE('01-08-2025','DD-MM-YYYY'),'HARRY  
POTTER','Issued');
```

```
INSERT INTO borrower  
VALUES(2,'ARYAN',TO_DATE('15-08-2025','DD-MM-YYYY'),'DARK MATTER','Issued');
```

```
INSERT INTO borrower  
VALUES(3,'ROHAN',TO_DATE('24-07-2025','DD-MM-YYYY'),'SILENT HILL','Issued');
```

```
INSERT INTO borrower  
VALUES(4,'SANKET',TO_DATE('26-07-2025','DD-MM-YYYY'),'GOD OF WAR','Issued');
```

```
INSERT INTO borrower  
VALUES(5,'SARTHAK',TO_DATE('09-07-2025','DD-MM-YYYY'),'SPIDER-MAN','Issued');
```

```
DECLARE  
    i_roll_no NUMBER := 1;  
    name_of_book VARCHAR2(25) := 'HARRY POTTER';  
    no_of_days NUMBER;  
    return_date DATE := TRUNC(SYSDATE);  
    temp NUMBER;  
    doi DATE;  
    fine NUMBER := 0;  
BEGIN  
    -- Fetch date of issue  
    SELECT TRUNC(dateofissue)  
    INTO doi  
    FROM borrower  
    WHERE roll_no = i_roll_no  
        AND name_of_book = name_of_book;  
  
    -- Calculate days and fine  
    no_of_days := return_date - doi;  
    dbms_output.put_line('Days borrowed: ' || no_of_days);  
  
    IF no_of_days > 15 AND no_of_days <= 30 THEN  
        fine := 5 * no_of_days;  
    ELSIF no_of_days > 30 THEN  
        temp := no_of_days - 30;  
        fine := 150 + temp * 50;
```

```
END IF;

dbms_output.put_line('Fine amount: ' || fine);

-- Insert fine record
INSERT INTO fine (roll_no,date_of_return,amt)
VALUES (i_roll_no, return_date, fine);

-- Update borrower record
UPDATE borrower
SET status = 'RETURNED'
WHERE roll_no = i_roll_no
AND name_of_book = name_of_book;

COMMIT;
EXCEPTION
  WHEN NO_DATA_FOUND THEN
    dbms_output.put_line('No record found for this student/book.');
  WHEN OTHERS THEN
    dbms_output.put_line('Error: ' || SQLERRM);
END;
/
```