**Practice Work - 5**

Due Date: October 29th, 2015 ,10PM

1. Use the COMPANY database schema.

Create a new table Employee\_Salaries(Ssn, Salary) using SQL.

Salary: VARCHAR(15)

Write PL/SQL code to check the salary of an employee.

If the employee salary is above 60K, insert following tuple into Employee\_Salaries table: (Ssn, ‘HIGH’)

If the employee salary is between 40K-60K, insert following tuple to Employee\_Salaries table: (Ssn, ‘MEDIUM)

If the employee salary is below 40K, insert following tuple to Employee\_Salaries table: (Ssn, ‘LOW’)

Solution:

**Create Table statement:**

CREATE TABLE Employee\_Salaries

(

Ssn CHAR(9) PRIMARY KEY,

Salary VARCHAR(15),

FOREIGN KEY (Ssn) REFERENCES EMPLOYEE(SSN) ON DELETE CASCADE

);

**Procedure creation:**

create or replace procedure findSalaryType(x IN number, Y OUT varchar) AS

BEGIN

IF x < 40000 THEN

y:= 'LOW';

ElSIF x < 60000 THEN

y:= 'MEDIUM';

ELSE

y:= 'HIGH';

END IF;

END;

**pl/sql code to run procedure:**

set serveroutput on

DECLARE

thisEmployee EMPLOYEE%ROWTYPE;

y Employee\_Salaries.Salary%TYPE;

CURSOR AllEmployee IS

SELECT \* FROM EMPLOYEE;

BEGIN

OPEN AllEmployee;

LOOP

FETCH AllEmployee INTO thisEmployee;

EXIT WHEN (AllEmployee%NOTFOUND);

findSalaryType(thisEmployee.Salary,y);

INSERT INTO Employee\_Salaries VALUES(thisEmployee.SSN,Y);

END LOOP;

CLOSE AllEmployee;

END;

.

RUN;

2. Use LIBRARY database schema.

Write a stored procedure that retrieves the list of books that became overdue yesterday and that prints the book title and borrower name for each. (use PL/SQL)

Solution:

**Procedure creation:**

create or replace procedure checkYestOverdue AS

thisBookLoan Book\_loans%ROWTYPE;

thisBookName BOOK.TITLE%TYPE;

thisBorrowerName BORROWER.NAME%TYPE;

z number;

CURSOR AllBookloans IS

SELECT \* FROM Book\_loans;

BEGIN

OPEN AllBookloans;

LOOP

FETCH AllBookloans INTO thisBookloan;

EXIT WHEN (AllBookloans%NOTFOUND);

Z:=FLOOR(SYSDATE-thisBookloan.due\_date);

IF Z=2 THEN

select title into thisBookName from book where BOOK\_ID=thisBookloan.book\_id;

select name into thisBorrowerName from borrower where card\_no=thisBookloan.card\_no;

dbms\_output.put\_line('Book Name : '|| thisBookName);

dbms\_output.put\_line('Borrower Name : '|| thisBorrowerName);

END IF;

END LOOP;

CLOSE AllBookloans;

END;

**pl/sql code to run procedure:**

set serveroutput on;

BEGIN

dbms\_output.put\_line('Details of books which got overdue yesterday :');

checkYestOverdue;

END;

.

RUN;