**Exercise 3: Stored Procedures**

**Source code:**

CREATE TABLE Accounts (

AccountID NUMBER PRIMARY KEY,

CustomerID NUMBER,

AccountType VARCHAR2(20),

Balance NUMBER

);

CREATE TABLE Employees (

EmployeeID NUMBER PRIMARY KEY,

Name VARCHAR2(50),

DepartmentID NUMBER,

Salary NUMBER

);

INSERT INTO Accounts VALUES (1001, 1, 'Savings', 10000);

INSERT INTO Accounts VALUES (1002, 2, 'Savings', 8000);

INSERT INTO Accounts VALUES (1003, 3, 'Current', 15000);

INSERT INTO Employees VALUES (201, 'Anjali', 10, 50000);

INSERT INTO Employees VALUES (202, 'Rahul', 10, 55000);

INSERT INTO Employees VALUES (203, 'Divya', 20, 60000);

COMMIT;

// scenario 1: ProcessMonthlyInterest

CREATE OR REPLACE PROCEDURE ProcessMonthlyInterest IS

BEGIN

UPDATE Accounts

SET Balance = Balance + (Balance \* 0.01)

WHERE AccountType = 'Savings';

COMMIT;

END;

// scenario 2: UpdateEmployeeBonus

CREATE OR REPLACE PROCEDURE UpdateEmployeeBonus (

p\_dept\_id IN NUMBER,

p\_bonus\_pct IN NUMBER

) IS

BEGIN

UPDATE Employees

SET Salary = Salary + (Salary \* p\_bonus\_pct / 100)

WHERE DepartmentID = p\_dept\_id;

COMMIT;

END;

// scenario 3: TransferFunds

CREATE OR REPLACE PROCEDURE TransferFunds (

p\_from\_account IN NUMBER,

p\_to\_account IN NUMBER,

p\_amount IN NUMBER

) IS

v\_balance NUMBER;

BEGIN

SELECT Balance INTO v\_balance

FROM Accounts

WHERE AccountID = p\_from\_account;

IF v\_balance < p\_amount THEN

RAISE\_APPLICATION\_ERROR(-20001, 'Insufficient funds in source account');

END IF;

UPDATE Accounts

SET Balance = Balance - p\_amount

WHERE AccountID = p\_from\_account;

UPDATE Accounts

SET Balance = Balance + p\_amount

WHERE AccountID = p\_to\_account;

COMMIT;

END;

EXEC ProcessMonthlyInterest;

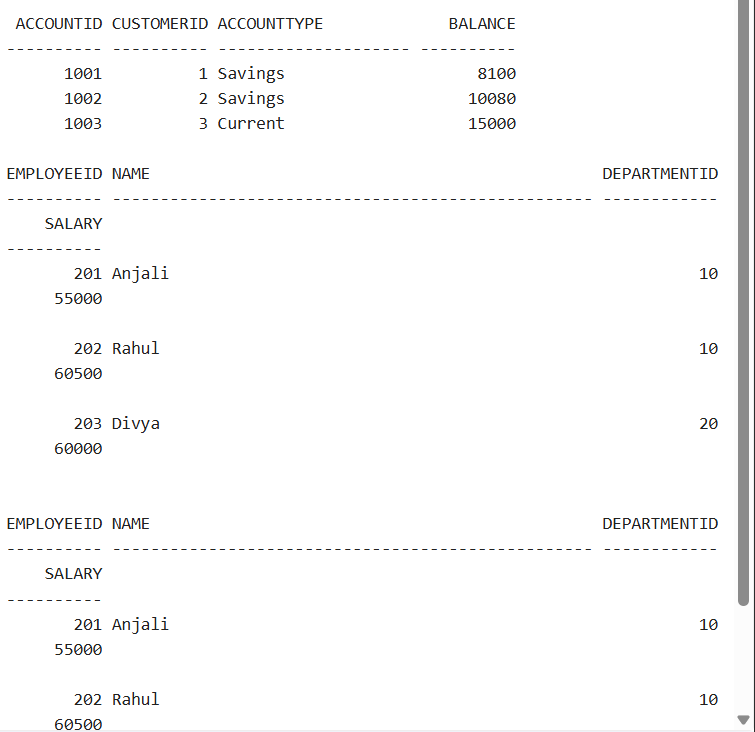
EXEC UpdateEmployeeBonus(10, 10);

EXEC TransferFunds(1001, 1002, 2000);

SELECT \* FROM Accounts;

SELECT \* FROM Employees;

**Output :**

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