**EXERCISE 1:Stored Procedures:**

**SCENARIO 1:**

CREATE OR REPLACE PROCEDURE ProcessMonthlyInterest IS

BEGIN

FOR rec IN (

SELECT AccountID, Balance

FROM Accounts

WHERE AccountType = 'Savings'

) LOOP

UPDATE Accounts

SET Balance = rec.Balance + (rec.Balance \* 0.01)

WHERE AccountID = rec.AccountID.

END LOOP;

COMMIT;

END;  
  
  
**OUTPUT:  
  
1% interest added to all Savings accounts.**

**- AccountID 1 updated to 1010**  
  
**SCENARIO 2:**

CREATE OR REPLACE PROCEDURE UpdateEmployeeBonus (

p\_Department IN VARCHAR2,

p\_BonusPercent IN NUMBER

) IS

BEGIN

FOR rec IN (

SELECT EmployeeID, Salary

FROM Employees

WHERE Department = p\_Department

) LOOP

UPDATE Employees

SET Salary = rec.Salary + (rec.Salary \* p\_BonusPercent / 100)

WHERE EmployeeID = rec.EmployeeID;

END LOOP;

COMMIT;

END;  
  
**OUTPUT:  
  
10% bonus applied to IT department employees.**

**- Bob Brown’s salary updated to 66000**  
**SCENARIO 3:**

CREATE OR REPLACE PROCEDURE TransferFunds (

p\_FromAccountID IN NUMBER,

p\_ToAccountID IN NUMBER,

p\_Amount IN NUMBER

) IS

v\_FromBalance NUMBER;

BEGIN

SELECT Balance INTO v\_FromBalance FROM Accounts

WHERE AccountID = p\_FromAccountID FOR UPDATE;

IF v\_FromBalance < p\_Amount THEN

RAISE\_APPLICATION\_ERROR(-20001, 'Insufficient balance');

END IF;

UPDATE Accounts

SET Balance = Balance - p\_Amount

WHERE AccountID = p\_FromAccountID;

UPDATE Accounts

SET Balance = Balance + p\_Amount

WHERE AccountID = p\_ToAccountID;

COMMIT;

END;  
  
  
**OUTPUT:  
  
$500 transferred from Account 1 to Account 2.**

**New balances → Account 1: 510, Account 2: 2000**