# Exercise 3: Stored Procedures - PL/SQL

## Scenario 1: Process Monthly Interest for Savings Accounts

CREATE OR REPLACE PROCEDURE ProcessMonthlyInterest AS  
BEGIN  
 FOR rec IN (SELECT AccountID, Balance FROM SavingsAccounts) LOOP  
 UPDATE SavingsAccounts  
 SET Balance = Balance + (rec.Balance \* 0.01)  
 WHERE AccountID = rec.AccountID;  
 END LOOP;  
 COMMIT;  
END;

## Scenario 2: Update Employee Bonus Based on Performance

CREATE OR REPLACE PROCEDURE UpdateEmployeeBonus(p\_DepartmentID IN NUMBER, p\_BonusPercent IN NUMBER) AS  
BEGIN  
 UPDATE Employees  
 SET Salary = Salary + (Salary \* p\_BonusPercent / 100)  
 WHERE DepartmentID = p\_DepartmentID;  
 COMMIT;  
END;

## Scenario 3: Transfer Funds Between Accounts

CREATE OR REPLACE PROCEDURE TransferFunds(  
 p\_FromAccountID IN NUMBER,  
 p\_ToAccountID IN NUMBER,  
 p\_Amount IN NUMBER  
) AS  
 v\_Balance NUMBER;  
BEGIN  
 SELECT Balance INTO v\_Balance FROM Accounts WHERE AccountID = p\_FromAccountID;  
  
 IF v\_Balance >= p\_Amount THEN  
 UPDATE Accounts  
 SET Balance = Balance - p\_Amount  
 WHERE AccountID = p\_FromAccountID;  
  
 UPDATE Accounts  
 SET Balance = Balance + p\_Amount  
 WHERE AccountID = p\_ToAccountID;  
  
 COMMIT;  
 ELSE  
 RAISE\_APPLICATION\_ERROR(-20001, 'Insufficient balance for transfer.');  
 END IF;  
END;