# Exercise 3: Stored Procedures

## Scenario 1: Process Monthly Interest

CREATE OR REPLACE PROCEDURE ProcessMonthlyInterest IS  
BEGIN  
 FOR acc IN (SELECT AccountID, Balance   
 FROM Accounts   
 WHERE AccountType = 'Savings')   
 LOOP  
 UPDATE Accounts  
 SET Balance = Balance + (Balance \* 0.01),  
 LastModified = SYSDATE  
 WHERE AccountID = acc.AccountID;  
 END LOOP;  
 COMMIT;  
END;  
/

## Scenario 2: Update Employee Bonus

CREATE OR REPLACE PROCEDURE UpdateEmployeeBonus(  
 p\_dept IN VARCHAR2,  
 p\_bonus\_pct IN NUMBER  
) IS  
BEGIN  
 UPDATE Employees  
 SET Salary = Salary + (Salary \* p\_bonus\_pct / 100)  
 WHERE Department = p\_dept;  
 COMMIT;  
END;  
/

## Scenario 3: Transfer Funds

CREATE OR REPLACE PROCEDURE TransferFunds(  
 p\_from\_acc IN NUMBER,  
 p\_to\_acc IN NUMBER,  
 p\_amount IN NUMBER  
) IS  
 v\_balance NUMBER;  
BEGIN  
 SELECT Balance INTO v\_balance FROM Accounts WHERE AccountID = p\_from\_acc;  
  
 IF v\_balance >= p\_amount THEN  
 UPDATE Accounts  
 SET Balance = Balance - p\_amount  
 WHERE AccountID = p\_from\_acc;  
  
 UPDATE Accounts  
 SET Balance = Balance + p\_amount  
 WHERE AccountID = p\_to\_acc;  
  
 COMMIT;  
 ELSE  
 RAISE\_APPLICATION\_ERROR(-20001, 'Insufficient balance in source account');  
 END IF;  
END;  
/