**Exercise 3: Stored Procedures**

**Scenario 1**

**Question:** Write a stored procedure **ProcessMonthlyInterest** that calculates and updates the balance of all savings accounts by applying an interest rate of 1% to the current balance.

**CODE:**

CREATE OR REPLACE PROCEDURE ProcessMonthlyInterest AS

BEGIN

UPDATE accounts

SET balance = balance + (balance \* 0.01)

WHERE account\_type = 'Savings';

COMMIT;

END;

**Scenario 2:**

**Question:** Write a stored procedure **UpdateEmployeeBonus** that updates the salary of employees in a given department by adding a bonus percentage passed as a parameter.

**CODE:**

CREATE OR REPLACE PROCEDURE UpdateEmployeeBonus (

dept\_id IN NUMBER,

bonus\_pct IN NUMBER

) AS

BEGIN

UPDATE employees

SET salary = salary + (salary \* bonus\_pct / 100)

WHERE department\_id = dept\_id;

COMMIT;

END;

**Scenario 3:**

**Question:** Write a stored procedure **TransferFunds** that transfers a specified amount from one account to another, checking that the source account has sufficient balance before making the transfer.

**CODE:**

CREATE OR REPLACE PROCEDURE TransferFunds(from\_id IN NUMBER, to\_id IN NUMBER, amt IN NUMBER) AS bal NUMBER;

BEGIN

SELECT balance INTO bal FROM accounts WHERE account\_id = from\_id;

IF bal >= amt THEN

UPDATE accounts SET balance = balance - amt WHERE account\_id = from\_id;

UPDATE accounts SET balance = balance + amt WHERE account\_id = to\_id;

END IF;

END;