PL/SQL Exercise 4: Functions

# Scenario 1: CalculateAge

CREATE OR REPLACE FUNCTION CalculateAge (

p\_dob IN DATE

) RETURN NUMBER

IS

v\_age NUMBER;

BEGIN

v\_age := FLOOR(MONTHS\_BETWEEN(SYSDATE, p\_dob) / 12);

RETURN v\_age;

END;

# Scenario 2: CalculateMonthlyInstallment

CREATE OR REPLACE FUNCTION CalculateMonthlyInstallment (

p\_loanAmount IN NUMBER,

p\_annualRate IN NUMBER,

p\_years IN NUMBER

) RETURN NUMBER

IS

v\_monthlyRate NUMBER := p\_annualRate / 12 / 100;

v\_months NUMBER := p\_years \* 12;

v\_emi NUMBER;

BEGIN

v\_emi := (p\_loanAmount \* v\_monthlyRate \* POWER(1 + v\_monthlyRate, v\_months)) /

(POWER(1 + v\_monthlyRate, v\_months) - 1);

RETURN ROUND(v\_emi, 2);

END;

# Scenario 3: HasSufficientBalance

CREATE OR REPLACE FUNCTION HasSufficientBalance (

p\_accountID IN NUMBER,

p\_amount IN NUMBER

) RETURN BOOLEAN

IS

v\_balance NUMBER;

BEGIN

SELECT Balance INTO v\_balance FROM Accounts WHERE AccountID = p\_accountID;

RETURN v\_balance >= p\_amount;

EXCEPTION

WHEN NO\_DATA\_FOUND THEN

RETURN FALSE;

END;

# Output:

