**Exercise 4: Functions**

**Scenario 1: Calculate the age of customers for eligibility checks**

CREATE FUNCTION CalculateAge(

p\_dob DATE)

RETURN NUMBER

AS

v\_age NUMBER;

BEGIN

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

RETURN v\_age;

END CalculateAge;

**Scenario 2: Compute the monthly installment for a loan**CREATE FUNCTION CalculateMonthlyInstallment(

p\_loan\_amount NUMBER,

p\_interest\_rate NUMBER,

p\_loan\_duration NUMBER)

RETURN NUMBER

AS

v\_monthly\_installment NUMBER;

BEGIN

v\_monthly\_installment := p\_loan\_amount \* p\_interest\_rate / 12 / (1 - POWER(1 + p\_interest\_rate / 12, -p\_loan\_duration \* 12));

RETURN v\_monthly\_installment;

END CalculateMonthlyInstallment;

**Scenario 3: Check if a customer has sufficient balance before making a transaction**CREATE FUNCTION HasSufficientBalance(

p\_account\_id NUMBER,

p\_amount NUMBER)

RETURN BOOLEAN

AS

v\_balance NUMBER;

BEGIN

SELECT balance INTO v\_balance

FROM accounts

WHERE account\_id = p\_account\_id;

RETURN v\_balance >= p\_amount;

END HasSufficientBalance;