# Exercise 4: Functions

## Scenario 1

-- Exercise 4: Functions  
  
-- Scenario 1: CalculateAge  
CREATE OR REPLACE FUNCTION CalculateAge(dob DATE) RETURN NUMBER IS  
BEGIN  
 RETURN FLOOR(MONTHS\_BETWEEN(SYSDATE, dob) / 12);  
END;  
/

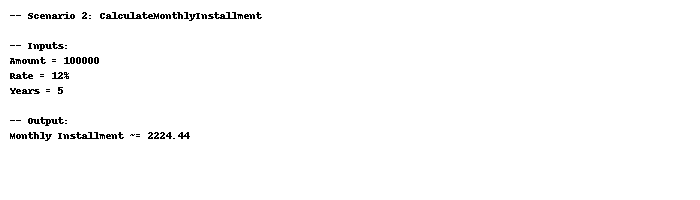
Output:



## Scenario 2

-- Scenario 2: CalculateMonthlyInstallment  
CREATE OR REPLACE FUNCTION CalculateMonthlyInstallment(amount NUMBER, rate NUMBER, years NUMBER) RETURN NUMBER IS  
 monthly\_rate NUMBER := rate / (12 \* 100);  
 months NUMBER := years \* 12;  
BEGIN  
 RETURN amount \* monthly\_rate / (1 - POWER(1 + monthly\_rate, -months));  
END;  
/

Output:



## Scenario 3

-- Scenario 3: HasSufficientBalance  
CREATE OR REPLACE FUNCTION HasSufficientBalance(account\_id NUMBER, amt NUMBER) RETURN BOOLEAN IS  
 v\_balance NUMBER;  
BEGIN  
 SELECT Balance INTO v\_balance FROM Accounts WHERE AccountID = account\_id;  
 RETURN v\_balance >= amt;  
EXCEPTION  
 WHEN NO\_DATA\_FOUND THEN  
 RETURN FALSE;  
END;  
/

Output:

