Exercise 1: Control Structures

Scenario 1: The bank wants to apply a discount to loan interest rates for customers above 60 years old.

Question: Write a PL/SQL block that loops through all customers, checks their age, and if they are above 60, apply a 1% discount to their current loan interest rates.

Scenario 2: A customer can be promoted to VIP status based on their balance. Question: Write a PL/SQL block that iterates through all customers and sets a flag IsVIP to TRUE for those with a balance over $10,000.

Scenario 3: The bank wants to send reminders to customers whose loans are due within the next 30 days.

Question: Write a PL/SQL block that fetches all loans due in the next 30 days and prints a reminder message for each customer.

-- Customer table

CREATE TABLE customers (

customer\_id NUMBER PRIMARY KEY,

name VARCHAR2(50),

age NUMBER,

balance NUMBER,

is\_vip VARCHAR2(5) DEFAULT 'FALSE'

);

-- Loan table

CREATE TABLE loans (

loan\_id NUMBER PRIMARY KEY,

customer\_id NUMBER,

loan\_amount NUMBER,

interest\_rate NUMBER,

due\_date DATE,

FOREIGN KEY (customer\_id) REFERENCES customers(customer\_id)

);

INSERT INTO customers VALUES (1, 'Alice', 65, 15000, 'FALSE');

INSERT INTO customers VALUES (2, 'Bob', 45, 8000, 'FALSE');

INSERT INTO customers VALUES (3, 'Charlie', 70, 20000, 'FALSE');

INSERT INTO loans VALUES (101, 1, 50000, 5.5, SYSDATE + 20);

INSERT INTO loans VALUES (102, 2, 30000, 6.0, SYSDATE + 40);

INSERT INTO loans VALUES (103, 3, 45000, 5.0, SYSDATE + 10);

COMMIT;

Scenario 1:

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Scenario 2:

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Scenario 3:

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SELECT \* FROM loans;

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SELECT \* FROM customers;

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