**Exercise 5: Triggers**

**Scenario 1:**

**CREATE OR REPLACE TRIGGER UpdateCustomerLastModified**

**BEFORE UPDATE ON customers**

**FOR EACH ROW**

**BEGIN**

**:NEW.LastModified := SYSDATE;**

**END UpdateCustomerLastModified;**

**/**

**Scenario 2:**

**CREATE OR REPLACE TRIGGER LogTransaction**

**AFTER INSERT ON transactions**

**FOR EACH ROW**

**BEGIN**

**INSERT INTO AuditLog (transaction\_id, account\_id, transaction\_type, amount, transaction\_date)**

**VALUES (:NEW.transaction\_id, :NEW.account\_id, :NEW.transaction\_type, :NEW.amount, SYSDATE);**

**END LogTransaction;**

**/**

**Scenario 3:**

**CREATE OR REPLACE TRIGGER CheckTransactionRules**

**BEFORE INSERT ON transactions**

**FOR EACH ROW**

**DECLARE**

**v\_balance NUMBER;**

**BEGIN**

**IF :NEW.transaction\_type = 'WITHDRAWAL' THEN**

**SELECT balance INTO v\_balance FROM accounts WHERE account\_id = :NEW.account\_id;**

**IF :NEW.amount > v\_balance THEN**

**RAISE\_APPLICATION\_ERROR(-20001, 'Insufficient funds for withdrawal.');**

**END IF;**

**ELSIF :NEW.transaction\_type = 'DEPOSIT' THEN**

**IF :NEW.amount <= 0 THEN**

**RAISE\_APPLICATION\_ERROR(-20002, 'Deposit amount must be positive.');**

**END IF;**

**END IF;**

**END CheckTransactionRules;**

**/**