

HANDSON 6: Stored Procedures

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-- Use the correct database
USE bankdetails;

-- Drop the procedure if it already exists
DROP PROCEDURE IF EXISTS ProcessMonthlyInterest;

-- Create ProcessMonthlyInterest procedure
DELIMITER //
CREATE PROCEDURE ProcessMonthlyInterest()
BEGIN
    UPDATE accounts
    SET balance = balance * 1.01
    WHERE account_type = 'savings';
END //
DELIMITER ;

-- Drop the procedure if it already exists
DROP PROCEDURE IF EXISTS UpdateEmployeeBonus;

-- Create UpdateEmployeeBonus procedure
DELIMITER //
CREATE PROCEDURE UpdateEmployeeBonus(
    IN dept_name VARCHAR(50),
    IN bonus_percent DECIMAL(5,2)
)
BEGIN
    UPDATE employees
    SET salary = salary + (salary * bonus_percent / 100)
    WHERE department = dept_name;
END //
DELIMITER ;

-- Drop the procedure if it already exists
DROP PROCEDURE IF EXISTS TransferFunds;

-- Create TransferFunds procedure
DELIMITER //
CREATE PROCEDURE TransferFunds(
    IN from_id INT,
    IN to_id INT,
    IN amount DECIMAL(10,2)
)
BEGIN
    DECLARE from_balance DECIMAL(10,2);

    -- Get balance of source account
    SELECT balance INTO from_balance FROM accounts WHERE account_id = from_id;

    IF from_balance >= amount THEN
        -- Deduct from source
        UPDATE accounts
        SET balance = balance - amount
        WHERE account_id = from_id;

        -- Add to destination
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UPDATE accounts
SET balance = balance + amount
WHERE account_id = to_id;
ELSE
    SIGNAL SQLSTATE '45000' SET MESSAGE_TEXT = 'Insufficient balance';
END IF;
END //
DELIMITER ;

-- Example calls (commented out)
-- CALL ProcessMonthlyInterest();
-- CALL UpdateEmployeeBonus('IT', 10);
-- CALL TransferFunds(1, 3, 1000.00);

```

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Command Prompt - mysql -u x
-> );
Query OK, 0 rows affected (0.05 sec)

mysql>
mysql> -- Sample data
mysql> INSERT INTO employees (name, department, salary)
-> VALUES
-> ('Aditi', 'HR', 30000),
-> ('Rohan', 'IT', 50000),
-> ('Kiran', 'IT', 45000);
Query OK, 3 rows affected (0.01 sec)
Records: 3 Duplicates: 0 Warnings: 0

mysql>
mysql> -- Stored Procedure
mysql> DELIMITER //
mysql>
mysql> CREATE PROCEDURE UpdateEmployeeBonus(
-> IN dept_name VARCHAR(50),
-> IN bonus_percent DECIMAL(5,2)
-> )
-> BEGIN
-> UPDATE employees
-> SET salary = salary + (salary * bonus_percent / 100)
-> WHERE department = dept_name;
-> END //
Query OK, 0 rows affected (0.01 sec)

mysql>
mysql> DELIMITER ;
mysql>
mysql> -- To run:
mysql> CALL UpdateEmployeeBonus('IT', 10); -- 10% bonus for IT dept
Query OK, 2 rows affected (0.01 sec)

mysql> DELIMITER //
mysql>
mysql> CREATE PROCEDURE TransferFunds(
-> IN from_id INT,
-> IN to_id INT,
-> IN amount DECIMAL(10,2)

```