

ITCS393 Database Systems Lab

Lab14 Exercise

Dr. Petch Sajjacholapunt

Dr. Wudhichart Sawangphol

Dr. Jidapa Kraisangka

Petch.saj@mahidol.edu



Lab13 Exercise (cont.)

- Instructions

1. Write the SQL commands to answer all questions
2. Save your final SQL script rename it as
“L14grYidxx88xxx.sql”.
 - Y is your study Group
 - xx88xxx is your student ID
3. Submit the SQL file on Mycourses.

Lab14 Exercise

USE *Transactions* Table to do the following exercise.

Q0: Create *BankAccount* table using the following statements

```
CREATE TABLE BankAccount (
    AccountNum INT NOT NULL PRIMARY KEY,
    ACC_ID INT NOT NULL,
    AccountBalance DECIMAL(10,2),
    FOREIGN KEY (ACC_ID) REFERENCES accounts(acc_id)
);
```

Lab14 Exercise

Q1: Create a store procedure 'AddAccounts' that insert 3 records as follow (no need to pass parameters). If the records can be inserted, commit the transaction. Otherwise, rollback the transaction.

	AccountNum	ACC_ID	AccountBalance
▶	117	1	1000.00
	118	2	2000.00
	119	3	500.00

Run the transaction in Q1, select all data in *BankAccount*, and explain the results.
Run the transaction in Q1 again, select all data, and explain the results.

Lab14 Exercise

Q2: Create 'TransferMoney' transaction to transfer money from one account to another account using the variables declared below ---> to transfer money '550' from account number 117 to account number 118

```

DECLARE @from INT = 117
DECLARE @to INT = 118
DECLARE @amount DECIMAL(10,2) = 550

-- YOUR CODE GOES HERE --

```

	AccountNum	ACC_ID	AccountBalance
▶	117	1	1000.00
	118	2	2000.00
	119	3	500.00

BEFORE



	AccountNum	ACC_ID	AccountBalance
▶	117	1	450.00
	118	2	2550.00
	119	3	500.00

AFTER

You have to update the account balance of these bank accounts (both @to and @from). If the balance in the account is enough to transfer, print successfully transferred message, and commit the transaction. Otherwise, print insufficient balance and rollback the transaction.

(1 row affected)
 (1 row affected)
 SUCCESSFULLY TRANSFERRED

commit

(1 row affected)
 (1 row affected)
 INSUFFICIENT BALANCE

rollback

Run the transaction Q2 twice, see the results, and explain what happens.