Lab Assignment 11 6422771251 Matas Thanamee

Assignment 1:

Stored Procedure to Deposit Money:

DELIMITER // CREATE PROCEDURE DepositMoney(accountID INT, depositAmount FLOAT) BEGIN DECLARE currentBalance FLOAT;

- -- Get the current balance of the account SELECT bal INTO currentBalance FROM account WHERE ID = accountID;
- -- Update the balance by adding the deposit amount SET currentBalance = currentBalance + depositAmount;
- -- Update the 'bal' column with the new balance UPDATE account SET bal = currentBalance WHERE ID = accountID; END // DELIMITER;

Stored Procedure to Withdraw Money:

DELIMITER // CREATE PROCEDURE WithdrawMoney(accountID INT, withdrawAmount FLOAT) BEGIN DECLARE currentBalance FLOAT;

- -- Get the current balance of the account SELECT bal INTO currentBalance FROM account WHERE ID = accountID:
- -- Check if there is enough balance to withdraw IF currentBalance >= withdrawAmount THEN -- Update the balance by subtracting the withdraw amount SET currentBalance = currentBalance withdrawAmount;
- -- Update the 'bal' column with the new balance UPDATE account SET bal = currentBalance WHERE ID = accountID; ELSE SIGNAL SQLSTATE '45000' SET MESSAGE_TEXT = 'Not enough money'; END IF; END // DELIMITER ;

Assignment 2:

Trigger to Prevent Transaction Edit:

DELIMITER // CREATE TRIGGER PreventTransactionEdit BEFORE UPDATE ON 'transactions' FOR EACH ROW BEGIN SIGNAL SQLSTATE '45000' SET MESSAGE_TEXT = 'Transaction edit is not allowed'; END // DELIMITER:

Trigger to Check Balance before Insert:

DELIMITER // CREATE TRIGGER CheckBalanceBeforeInsert BEFORE INSERT ON 'transactinos' FOR EACH ROW BEGIN DECLARE currentBalance FLOAT;

SELECT bal INTO current Balance FROM account WHERE ID = NEW. account id: $\label{eq:signal} IF~currentBalance < NEW.amount~THEN~SIGNAL~SQLSTATE~'45000'~SET~MESSAGE_TEXT = 'Not~enough~money'; END~IF; END~//~DELIMITER~;$