



**SSN COLLEGE OF ENGINEERING**  
**Department of**  
**Computer Science &**  
**Engineering**

**Faculty:**  
**P. Mirunalini, Asso. Prof**  
**N.Sujaadeen, Asst. Prof.**

*UCS1412 – Database Lab*

## Assignment – 7

***Assigned: 19-May-23***  
***Due: 1 Lab Hour***

**Title:** *PL/SQL – Triggers*

## Banking Transaction System

Consider the following relational schema for a banking database application:

**CUSTOMER (CID, CNAME, AGE, ADDRESS, PHONE)**

**ACCOUNT (ANO, ATYPE, BALANCE, CID)**

**TRANSACTION (TID, ANO, TTYPE, TDATE, TAMOUNT)**

An account type (ATYPE) can be a savings account or a current account. A customer can have both types of accounts. Transaction type (TTYPE) can be 'D' or 'W' where D – Deposit, W – Withdrawal.

Write a PL/SQL Trigger for the following:

**Note:**

- a. Use implicit/explicit cursor wherever required.
  - b. Use *cust\_acct.sql* to populate the database.
1. During Withdrawal, check whether the transaction amount is less than the available balance. Event : Insert/Update (tamount)  
If ttype=Withdrawal and tamount>balance then  
raise 'Available Balance is lesser than the Transaction amount'
  2. Implement the following constraint to update the balance of an account for the transactions of both the Deposit or Withdrawal type.  
Event : Insert/Update (tamount)  
If ttype = Deposit then balance = balance + tamount  
If ttype = Withdrawal then balance = balance - tamount
  3. Implement the following constraint for Withdrawal transactions. Event : Insert
    - a. A customer can have at most 3 withdrawals per day per account.
    - b. The maximum amount of withdrawal for each transaction is Rs.30000/-

[illegible]