**LAB EXERCISES**

**EX.NO:05**

**APPLYING FLOW CONTROL STATEMENTS**

**AIM:**

**To create a table Bank and to apply flow control statements to do some transactions using the database College.**

**PROCEDURE:**

1. **Using the database 'College':**

* **mysql> USE College;**
* **Database changed**

1. **Create the table Bank:**

* **CREATE TABLE Bank (`Account-No` CHAR(6) PRIMARY KEY, `Customer Name ` VARCHAR(15), Balance DECIMAL(15,2));**
* **Query OK, 0 rows affected, 3 warnings (0.05 sec)**
* **mysql> DESCRIBE Bank;**
* **3 rows in set (0.02 sec)**

1. **Inserting rows into the table Bank:**

* **mysql> INSERT INTO Bank VALUES ('AOB001', 'Raj', 20000.00);**
* **Query OK, 1 row affected (0.01 sec)**
* **mysql> INSERT INTO Bank VALUES ('AOB002', 'Shiv', 10000.00);**
* **Query OK, 1 row affected (0.01 sec)**
* **mysql> INSERT INTO Bank VALUES ('AOB003', 'Kanthan', 15000.00);**
* **Query OK, 1 row affected (0.01 sec)**
* **mysql> INSERT INTO Bank VALUES ('AOB004', 'Priya', 50000.00);**
* **Query OK, 1 row affected (0.01 sec)**
* **mysql> INSERT INTO Bank VALUES ('AOB005', 'Latha', 30000.00);**
* **Query OK, 1 row affected (0.01 sec)**

1. **Querying Bank:**

* **mysql> SELECT \* FROM Bank;**
* **5 rows in set (0.01 sec)**

1. **Create a Table Transaction:**

* **mysql>CREATE TABLE Transaction(`Account-NO` CHAR(6), TType ENUM('Deposit', 'Withdrawal'), Amount DECIMAL(15,2),FOREIGN KEY (`Account-NO`) REFERENCES Bank(`Account-NO));**
* **Query OK, 0 rows affected (0.06 sec)**
* **mysql>** **DESC Transaction;**
* **3 rows in set (0.00 sec)**

1. **Querying Transaction without inserting rows:**

* **mysql>SELECT \* FROM Transaction;**
* **Empty set (0.00 sec)**

1. **Inserting a row into transaction using variables:**

* **mysql> SET @AccId = 'AOB004';**
* **Query OK, 0 rows affected (0.00 sec)**
* **mysql> SET @TranType = 'Withdrawal';**
* **Query OK, 0 rows affected (0.00 sec)**
* **mysql> SET @Amo = 2000;**
* **Query OK, 0 rows affected (0.00 sec)**
* **mysql> INSERT INTO Transaction(`Account-NO`, TType, Amount) VALUES (@AccId, @TranType, @Amo);**
* **Query OK, 1 row affected (0.01 sec)**

1. **Using a flow control statement WHEN for withdrawal:**

* **mysql>** **UPDATE Bank**
* **SET Balance = CASE**

**-> WHEN @TranType = 'Withdrawal'**

**-> THEN**

**-> Balance - @Amo**

**-> ELSE**

**-> Balance**

**-> END**

**-> WHERE `Account-NO` = @AccId;**

* **Query OK, 1 row affected (0.01 sec)**
* **Rows matched: 1 Changed: 1  Warnings: 0**
* **SELECT \* FROM Bank;**
* **5 rows in set (0.00 sec)**

1. **Inserting a Row into Transaction using variables:**

* **mysql> SET @AccId = 'AOB002';**
* **Query OK, 0 rows affected (0.00 sec)**
* **mysql> SET @TranType = 'Deposit';**
* **Query OK, 0 rows affected (0.00 sec)**
* **mysql> SET @Amo = 1000;**
* **Query OK, 0 rows affected (0.00 sec)**
* **mysql> INSERT INTO Transaction (`Account-NO`, TType, Amount) VALUES (@AccId, @TranType, @Amo);**
* **Query OK, 1 row affected (0.01 sec)**

1. **Using flow control IF() for deposit:**

* **mysql> UPDATE Bank**

**-> SET Balance = IF(@TranType = 'Deposit', Balance + @Amo, Balance)**

**-> WHERE `Account-NO `= @AccId;**

* **Query OK, 1 row affected (0.01 sec)**
* **Rows matched: 1 Changed: 1 Warnings: 0**

1. **Querying transaction:**

* **mysql> SELECT \* FROM Transaction ORDER BY `Account-NO`;**
* **2 rows in set (0.00 sec)**

1. **Querying bank:**

* **mysql> SELECT \* FROM Bank;**
* **5 rows in set (0.00 sec)**

**RESULT:**

**Thus the above MYSQL commands are executed and the output is obtained.**