Parshvanath Charitable Trust's
A. P. SHAH INSTITUTE OF TECHNOLOGY
(Approved by AICTE New Delhi & Govt. of Maharashtra, Affiliated to University of Mumbai)
(Religious Jain Minority)

Department of Computer Engineering

Academic Year: 2022-23 | **Name of Student: Mandvi Shukla**
Semester: IV | **Student ID:21102110**
Class / Branch: S.E C | **Date of Performance:08/04/23**
Subject: DBMS | **Date of Submission:08/04/23**

Experiment No-9

Aim: Implementation of Triggers in MySql.

Output:

1. Create following tables Member, Member_Audit

Query:

```
create table member1(
M_id int primary key AUTO_INCREMENT,
MFname char (20),
MLname char(20),
MCity varchar(10),
MContactNo varchar(10));

create table member_audit (
M_id int primary key AUTO_INCREMENT,
MFname char(20),
MLname char(20),
MCity varchar(10),
```

MContactNo varchar(10),

lastInserted dateTime);

2. Create a trigger to add a record in Member _audit with the current time, every time new record is entered into Member table.

Query

delimiter //

CREATE TRIGGER member1_AFTER_INSERT AFTER INSERT ON member1 FOR EACH ROW

->BEGIN INSERT INTO member_audit VALUES(new.m_id, new.mfname, new.mlname, new.mcity, new.mcontactno, (now())) ;

->END//

delimiter ;

Output:

```
mysql> insert into member1(M_id, MFname, MLname, MCity, MContactNo) values
    -> (1017,'Disha','Keval','Thane','7678860482');
Query OK, 1 row affected (0.10 sec)

mysql> insert into member1(M_id, MFname, MLname, MCity, MContactNo) values
    -> (1018,'Somi','Val','Mumbai','8678860482');
Query OK, 1 row affected (0.04 sec)

mysql> select * from member1;
+------+--------+--------+--------+------------+
| M_id | MFname | MLname | MCity  | MContactNo |
+------+--------+--------+--------+------------+
| 1016 | Nilima | Kher   | Bhopal | 7666860482 |
| 1017 | Disha  | Keval  | Thane  | 7678860482 |
| 1018 | Somi   | Val    | Mumbai | 8678860482 |
+------+--------+--------+--------+------------+
3 rows in set (0.00 sec)

mysql> select * from member_audit;
+------+--------+--------+--------+------------+---------------------+
| M_id | MFname | MLname | MCity  | MContactNo | lastInserted        |
+------+--------+--------+--------+------------+---------------------+
| 1016 | Nilima | Kher   | Bhopal | 7666860482 | 2023-04-08 13:16:14 |
| 1017 | Disha  | Keval  | Thane  | 7678860482 | 2023-04-08 13:16:23 |
| 1018 | Somi   | Val    | Mumbai | 8678860482 | 2023-04-08 13:16:40 |
+------+--------+--------+--------+------------+---------------------+
3 rows in set (0.00 sec)
```

3. Write a trigger to update the age of the employee in employee_age(ssn, age) table, after the employee record is entered into emp(fname, minit, Lname, ssn, bdate, address, sex, salary, superssn, dno) table.

Query:

```
CREATE TABLE emp (
Fname varchar(15) NOT NULL,
Minit char(1) DEFAULT NULL,
Lname varchar(15) NOT NULL,
Ssn char(9) NOT NULL,
Bdate date DEFAULT NULL,
Address varchar(30) DEFAULT NULL,
Sex char(1) DEFAULT NULL,
Salary decimal(10,2)
DEFAULT NULL,
Super_ssn char(9) DEFAULT NULL,
Dno int NOT NULL,
PRIMARY KEY (Ssn) ) ;

create table employee_age (
ssn char(9), age char(3),
primary key (ssn),
foreign key (ssn )
references emp(ssn));
```

Output:

```
mysql> select * from employee_age;
+-----------+------+
| ssn       | age  |
+-----------+------+
| 136567890 | 33   |
| 236567890 | 23   |
+-----------+------+
2 rows in set (0.00 sec)

mysql> select * from emp;
+--------+-------+-------+-----------+------------+---------+------+----------+-----------+-----+
| Fname  | Minit | Lname | Ssn       | Bdate      | Address | Sex  | Salary   | Super_ssn | Dno |
+--------+-------+-------+-----------+------------+---------+------+----------+-----------+-----+
| Shyam  | g     | Rey   | 136567890 | 1989-05-15 | Mumbai  | M    | 35789.00 | 123356789 |   4 |
| Shelly | g     | Tem   | 236567890 | 1999-05-15 | Mumbai  | M    | 45789.00 | 123356789 |   4 |
+--------+-------+-------+-----------+------------+---------+------+----------+-----------+-----+
2 rows in set (0.00 sec)
```

Conclusion: Triggers in MySQL was Implemented