**TRIGGERS AND ASSERTIONS**

**1. Create a trigger to insert before Employee’s salary=5000 if its salary is taken as null while inserting.**

mysql> SELECT ssn,name,salary,gender

-> FROM Employee;

+-----+---------+--------+--------+

| ssn | name | salary | gender |

+-----+---------+--------+--------+

| 111 | Deepika | 2000 | Female |

| 222 | Alia | 3000 | Female |

| 333 | Rohan | 4000 | Male |

| 444 | Sagar | 1000 | Male |

| 555 | Manan | 5000 | Male |

+-----+---------+--------+--------+

5 rows in set (0.04 sec)

mysql> delimiter //

mysql> CREATE trigger empcheck

-> BEFORE insert on Employee

-> FOR EACH ROW

-> IF NEW.salary is null

-> THEN

-> SET NEW.salary = 5000;

-> END IF;

-> //

mysql> INSERT INTO Employee(address,gender,salary,work\_exp,contact\_no,designation, ssn,name,reg\_no1)

-> VALUES( NULL , 'Female' , NULL , 3 , 991234, 'Developer', 666,'Sagarika',NULL);

Query OK, 1 row affected (0.07 sec)

mysql> SELECT ssn,name,salary,gender

-> FROM Employee;

+-----+----------+--------+--------+

| ssn | name | salary | gender |

+-----+----------+--------+--------+

| 111 | Deepika | 2000 | Female |

| 222 | Alia | 3000 | Female |

| 333 | Rohan | 4000 | Male |

| 444 | Sagar | 1000 | Male |

| 555 | Manan | 5000 | Male |

| 666 | Sagarika | 5000 | Female |

+-----+----------+--------+--------+

6 rows in set (0.00 sec)

**2. Create a trigger to insert values into backup table of the Airplane after**

**inserting it into the Airplane table.**

mysql> select \* from airplane;

+-------------+----------+----------+--------+--------+

| type | model\_no | airspeed | weight | reg\_no |

+-------------+----------+----------+--------+--------+

| Boeing 747 | 1 | 950 | 10000 | NULL |

| Boeing 777 | 2 | 1000 | 9000 | 2 |

| Airbus A360 | 3 | 1100 | 11000 | 3 |

| Airbus A380 | 4 | 1200 | 12000 | 4 |

| Boeing 737 | 5 | 900 | 8500 | 5 |

+-------------+----------+----------+--------+--------+

5 rows in set (0.01 sec)

mysql> select \* from airplane\_bkp;

+-------------+----------+----------+--------+--------+

| type | model\_no | airspeed | weight | reg\_no |

+-------------+----------+----------+--------+--------+

| Boeing 747 | 1 | 950 | 10000 | NULL |

| Boeing 777 | 2 | 1000 | 9000 | 2 |

| Airbus A360 | 3 | 1100 | 11000 | 3 |

| Airbus A380 | 4 | 1200 | 12000 | 4 |

| Boeing 737 | 5 | 900 | 8500 | 5 |

+-------------+----------+----------+--------+--------+

5 rows in set (0.06 sec)

mysql> CREATE trigger trig\_airplane\_bkp

-> AFTER insert on Airplane

-> FOR EACH ROW

-> insert into

-> Airplane\_bkp(type,model\_no,airspeed,weight,reg\_no)

-> VALUES(new.type,new.model\_no,new.airspeed,new.weight,new.reg\_no);

Query OK, 0 rows affected (0.06 sec)

mysql> INSERT INTO Airplane

-> VALUES('Boeing 747' , NULL , 950 , 10000, 1);

Query OK, 1 row affected (0.04 sec)

mysql> SELECT \* FROM Airplane;

+-------------+----------+----------+--------+--------+

| type | model\_no | airspeed | weight | reg\_no |

+-------------+----------+----------+--------+--------+

| Boeing 747 | 1 | 950 | 10000 | NULL |

| Boeing 777 | 2 | 1000 | 9000 | 2 |

| Airbus A360 | 3 | 1100 | 11000 | 3 |

| Airbus A380 | 4 | 1200 | 12000 | 4 |

| Boeing 737 | 5 | 900 | 8500 | 5 |

| Boeing 747 | 7 | 950 | 10000 | 1 |

+-------------+----------+----------+--------+--------+

6 rows in set (0.00 sec)

mysql> SELECT \* FROM Airplane\_bkp;

+-------------+----------+----------+--------+--------+

| type | model\_no | airspeed | weight | reg\_no |

+-------------+----------+----------+--------+--------+

| Boeing 747 | 1 | 950 | 10000 | NULL |

| Boeing 777 | 2 | 1000 | 9000 | 2 |

| Airbus A360 | 3 | 1100 | 11000 | 3 |

| Airbus A380 | 4 | 1200 | 12000 | 4 |

| Boeing 737 | 5 | 900 | 8500 | 5 |

| Boeing 747 | 7 | 950 | 10000 | 1 |

+-------------+----------+----------+--------+--------+

6 rows in set (0.00 sec)

**3. Create a trigger which sets reg\_no1=2 if it is null before updation on**

**Employee.**

mysql> SELECT ssn,name,gender,reg\_no1

-> FROM Employee;

+-----+----------+--------+---------+

| ssn | name | gender | reg\_no1 |

+-----+----------+--------+---------+

| 111 | Deepika | Female | NULL |

| 222 | Alia | Female | NULL |

| 333 | Rohan | Male | 1 |

| 444 | Sagar | Male | 1 |

| 555 | Manan | Male | 1 |

| 666 | Sagarika | Female | NULL |

+-----+----------+--------+---------+

6 rows in set (0.00 sec)

mysql> delimiter //

mysql> CREATE trigger Employee\_trig

-> BEFORE update on Employee

-> for each row

-> if new.reg\_no1 is null then

-> set new.reg\_no1=2;

-> end if;

-> //

Query OK, 0 rows affected (0.06 sec)

mysql> UPDATE Employee

-> SET name='Ashish'

-> WHERE ssn='222';

Query OK, 1 row affected (0.22 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> SELECT ssn,name,gender,reg\_no1

-> FROM Employee;

+-----+----------+--------+---------+

| ssn | name | gender | reg\_no1 |

+-----+----------+--------+---------+

| 111 | Deepika | Female | NULL |

| 222 | Ashish | Female | 2 |

| 333 | Rohan | Male | 1 |

| 444 | Sagar | Male | 1 |

| 555 | Manan | Male | 1 |

| 666 | Sagarika | Female | NULL |

+-----+----------+--------+---------+

6 rows in set (0.00 sec)

**4. Drop trigger trig\_airplane\_bkp.**

mysql> DROP trigger trig\_airplane\_bkp;

Query OK, 0 rows affected (0.02 sec)