

EXP 14

TRIGGERS

AIM: To execute TRIGGERS in sql

1)CREATE TABLE STUDENT387

```
SQL> CREATE TABLE STUDENT387
2  (
3      ID NUMBER(5),
4      NAME VARCHAR(20),
5      AGE NUMBER(3),
6      MATHS NUMBER(3),
7      ENGLISH NUMBER(3),
8      SCIENCE NUMBER(3),
9      RESULT VARCHAR2(4)
10 );
```

Table created.

2)DESC TABLE STUDENT387

```
SQL> DESC STUDENT387;
Name                               Null?      Type
-----
ID                                 NUMBER(5)
NAME                               VARCHAR2(20)
AGE                                NUMBER(3)
MATHS                              NUMBER(3)
ENGLISH                            NUMBER(3)
SCIENCE                            NUMBER(3)
RESULT                             VARCHAR2(4)
```

3)CREATE A TRIGGER

```
SQL> CREATE OR REPLACE TRIGGER grade_display
  2 BEFORE INSERT ON STUDENT387
  3 FOR EACH ROW
  4 BEGIN
  5 IF (:NEW.MATHS >=50 and :NEW.ENGLISH >=50 and :NEW.SCIENCE >=50) THEN
  6 :NEW.RESULT := 'PASS';
  7 ELSE
  8 :NEW.RESULT := 'FAIL';
  9 END IF;
10 END;
11 /

Trigger created.
```

4)INSERT VALUES INTO TABLE

```
SQL> INSERT INTO STUDENT387 VALUES(01, 'CHITRA', 21, 99, 96, 100, 'PASS');
1 row created.

SQL> INSERT INTO STUDENT387 VALUES(02, 'CHETANA', 21, 69, 86, 100, 'PASS');
1 row created.

SQL> INSERT INTO STUDENT387 VALUES(03, 'SREEJA', 21, 85, 92, 96, 'PASS');
1 row created.

SQL> INSERT INTO STUDENT387 VALUES(04, 'VIJAY', 21, 45, 36, 25, 'FAIL');
1 row created.

SQL> INSERT INTO STUDENT387 VALUES(05, 'LOKESH', 21, 36, 18, 10, 'FAIL');
1 row created.
```

5)SELECT FROM * STUDENT387

```
SQL> SELECT * FROM STUDENT387;
```

	ID	NAME	AGE	MATHS	ENGLISH	SCIENCE	RESU
1	CHITRA	21	99	96	100	PASS	
2	CHETANA	21	69	86	100	PASS	
3	SREEJA	21	85	92	96	PASS	
4	VIJAY	21	45	36	25	FAIL	
5	LOKESH	21	36	18	10	FAIL	

6)CREATE A TRIGGER

```
SQL> CREATE OR REPLACE TRIGGER invalid_age
  2 BEFORE INSERT ON STUDENT387
  3 FOR EACH ROW
  4 BEGIN
  5 IF :NEW.Age > 100 THEN
  6 raise_application_error(-20000,'YOU ARE INSERTING INVALID AGE!!');
  7 END IF;
  8 END;
  9 /
```

Trigger created.

7)OUTPUT SHOWING ERROR

```
SQL> INSERT INTO STUDENT387 VALUES(06,'MAYA',101,63,75,86,'PASS');
INSERT INTO STUDENT387 VALUES(06,'MAYA',101,63,75,86,'PASS')
*
ERROR at line 1:
ORA-20000: YOU ARE INSERTING INVALID AGE!!
ORA-06512: at "RA1911003010387.INVALID_AGE", line 3
ORA-04088: error during execution of trigger 'RA1911003010387.INVALID_AGE'
```

**RESULT: PL/SQL TRIGGERS WERE
SUCCESSFULLY IMPLEMENTED AND EXECUTED**

CHITRALEKHA.CH

RA1911003010387