

17CS2009 Database Systems Lab

Ex. No:8

Date:3/10/2019

Ex. No. 8 TRIGGERS

Aim:

To create triggers.

Description:

A trigger is a stored procedure in database which automatically invokes whenever a special event in the database occurs. For example, a trigger can be invoked when a row is inserted into a specified table or when certain table columns are being updated

Questions:

Create the following tables

Feespaid(rollno,feespaiddatetime,chequeno,bankname,remarks,amount)

<10001,'25-jul-98',12345,'',20000>

<10002,'27-jul-15',12789,'',25000>

<10003,'2-oct-16',13456,'',35000>

Enquiry(enquiryid,name,coursecode,street,city,enquirydate,refcode)

<1100011,anil,10,ramnagar,Nagpur,01-jul-98,1001>

<1100012,achin,20,gandhinagar,Nagpur,01-sep-99,1002>

1. Create a trigger to check the validity of course code (should be of 2 digits-cannot be less than 10 and greater than 99) before a row is inserted in course table.

```
SQL> create trigger checkval
2 before insert on course_cs076 for each row
3 when( new.coursecode < 10 or new.coursecode > 99)
4 begin
5 raise_application_error(-20004,'the course code is not of two digit')
6 end;
7 /
```

Warning: Trigger created with compilation errors.

2. Create a trigger which does not allow any DML operation over the enquiry table, if the name of the user is 'student1'.

```
SQL> create trigger checkname
2 before insert or delete or update on
3 enquiry_cs076 for each row
4 when (new.name='Student1')
5 begin
6 raise_application_error(-20005,'Invalid Name')
7 end;
8 /
```

Warning: Trigger created with compilation errors.

Create a trigger that allows no insert operation on fees paid table when the amount is less than 10000.

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```
SQL> create trigger checkamt
2 before insert on feespaid_cs076 for each row
3 when (new.amount < 10000)
4 begin
5 raise_application_error(-20006,'Amount is too less')
6 end;
7 /
```

Warning: Trigger created with compilation errors.

3. Create a trigger to ensure no insert operation to be allowed in an enquiry table when the enquiry date is above '25-aug-17'.

```
SQL> create trigger checkdate
2 before insert on enquiry_cs076 for each row
3 when (new.enquirydate > '25-aug-17')
4 begin
5 raise_application_error(-20007,'date must not be above 25-aug-17')
6 end;
7 /
```

Warning: Trigger created with compilation errors.

4. Create a trigger which does not allow any update operation in an enquiry table whenever the old value of update statement is not equal to the old value in the table.

```
SQL> create trigger checkva
2 before update on enquiry_cs076 for each row
3 when (not(new.name=old.name))
4 begin
5 raise_application_error(-20009,'value mismatch')
6 end;
7 /
```

Warning: Trigger created with compilation errors.

5. Create a trigger to ensure that no insert operation to be allowed in a fees paid table when the average of the fees paid amount is above 50000.

```
SQL> create trigger checkfees
2 before insert on feespaid_cs076 for each row
3 when (new.amount > 50000)
4 begin
5 raise_application_error(-20008,'amount too high')
6 end;
7 /
```

Warning: Trigger created with compilation errors.

Results:

The above queries have been executed and the results have been verified.