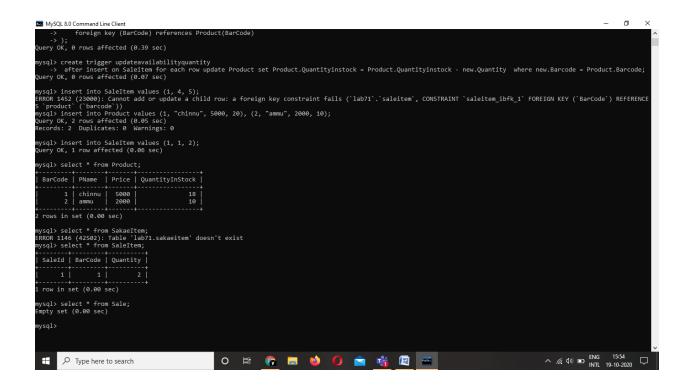
## **LAB 7:**

1. Product (BarCode, PName, Price, QuantityInStock) Sale (SaleID, DeliveryAddress, CreditCard) SaleItem (SaleID, BarCode, Quantity)

Create a trigger called updateAvailableQuantity that updates the quantity in stock in the Product table, for every product sold. The trigger should be executed after each insert operation on the Saleltem table: for the product with the given barcode (the one inserted into Saleltem), update the available quantity in Product table to be the old quantity minus the sold quantity.

```
create table Product (
  BarCode int.
  PName varchar(40),
  Price int,
  QuantityInStock int,
  primary key (BarCode));
create table Sale (
  SaleId int,
  DeliveryAddress varchar(40),
  CreditCard int.
  primary key(SaleID));
create table SaleItem (
  SaleId int.
  BarCode int,
  Quantity int,
  primary key (BarCode, SaleId),
  foreign key (BarCode) references Product(BarCode));
create trigger updateavailabilityquantity
after insert on Saleitem for each row update Product set Product.Quantityinstock =
Product.Quantityinstock - new.Quantity where new.Barcode = Product.Barcode;
insert into Product values (1, "chinnu", 5000, 20), (2, "ammu", 2000, 10);
insert into SaleItem values (1, 1, 2);
```



## 2. Activities (ActivityID, ActivityName)

Performers (PerformerID, PerformerName, Street, City, State, Zip, ActivityID)

Arenas (ArenaID, ArenaName, City, ArenaCapacity)

Concerts (PerformerID, ArenaID, ConcertDate, TicketPrice)

Create a trigger called deletePerformer that prevents the last performer for a particular activity to be deleted from the database. The trigger should be associated with a delete operation on the Peformers table: if the performer to be deleted is the last one for his/her particular ActivityID then the performer cannot be deleted. Otherwise, the performer should be deleted.

```
create table Activites (
   ActivityID int not null,
   ActivityName varchar(40),
   primary key (ActivityID)
   );
create table Performers (
   PerformerID int not null,
   PerformerName varchar(40),
   Street varchar(40),
```

```
City varchar(40),
State varchar(40),
Zip int(6),
  ActivityID int,
 primary key (PerformerID),
foreign key (ActivityID) references Activites(ActivityID)
 );
create table Arenas (
   ArenaID int not null,
 ArenaName varchar(40),
City varchar(40),
 ArenaCapacity varchar(40),
primary key (ArenaID)
 );
create table Concerts (
 PerformerID int,
 ArenaID int,
 ConcertDate datetime,
 TicketPrice int,
  primary key (PerformerID, ArenaID),
foreign key (PerformerID) references Performers(PerformerID),
  foreign key (ArenaID) references Arenas(ArenaID)
insert into Activites
values (1, "sports"), (2, "Swimming"), (3, "singing");
```

```
insert into Performers
values (1, "priyanka ", "Thuvakudi", "Trichy", "Tamil Nadu", 620015, 1), (2, "bharath", "Thuvakudi", "Trichy", "Tamil Nadu", 620015, 1), (3, "chinnu", "Thuvakudi", "Trichy", "Tamil Nadu", 620015, 2);
                                                                                                                                                                                                                                                                                                                                                                                                                                  Select MySQL 8.0 Command Line Client
         select * FROM Performer;
-> DELETE FROM Performer WHERE PerformerID = 1;
-> select * from Performer;
               > //
> END;
       -> ^C
scalt create table Employee (
-> Emp_no int,
-> Dept_no int,
-> Job varchar(20),
-> Salary int,
-> primary key(Emp_no),
-> foreign key (Dept_no) references Dept(Dept_no)
      y-s) ~ C
y-sql> create table Employee (
-> Emp_no int,
-> Dept_no int,
-> Job varchar(20),
-> Salary int,
-> prinary key(Emp_no),
-> foreign key (Dept_no) references Dept(Dept_no)
| AC | Mysql | delimiter // CREATE TRIGGER deletePerformer BEFORE DELETE ON Performers FOR EACH NUW | DEDAIN | MHERE Performers. ActivityID = old.ActivityId | Deletion is Prevented!'); | END IF; END; // Selection is Prevented!'); | END IF; END; // Selection | END IF; Selection | Selection 
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                                                                                                                                                                                                                                                                                                                                                                           ^ (€ 4) ■ ENG
3. Employee(Emp_no, Dept_no, Job,
Salary) Dept(Dept_no, Dept_name)
create table Employee (
                                  Emp_no int primary key,
                                  Dept no int,
                                 Job varchar(20),
                                  Salary int
            );
            create table Dept (
                                  Dept_no int,
                                  Dept_name varchar(20)
            );
            insert into Dept
            values (1, 'CSE'),
                                  (2, 'ECE');
            insert into Employee
            values (1, 1, 'professor', 50000),
```

(2, 2, 'HOD', 100000);

1. Write a TRIGGER to ensure that DEPT TABLE does not contain duplicate of null values in DEPTNO column.

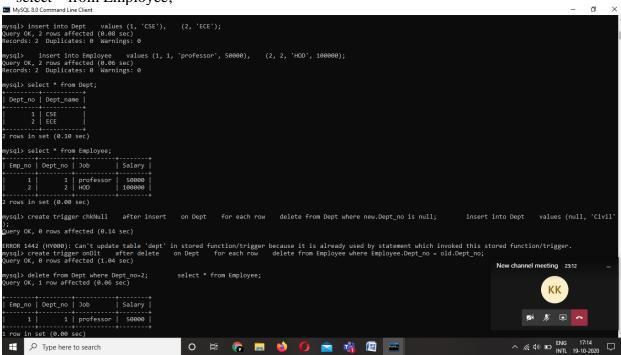
```
create trigger one
  before insert
  on Dept
  for each row
  begin
  if ( new.Dept_no is null)
  then
  SIGNAL SQLSTATE '45000' SET MESSAGE_TEXT = "null not allowed";
  end if;
  end;
  $$
```

2. Write a Trigger to carry out the following action: on deleting a deptno from dept table, all the records with that deptno has to be deleted from the emp table

```
create trigger onDlt
after delete
on Dept
for each row
delete from Employee where Employee.Dept_no = old.Dept_no;
```

delete from Dept where Dept\_no=2;

select \* from Employee;



3. Write a trigger that raises an User defined error message and does not allow updating and insertion.

create trigger insUpd

```
before insert

on Dept

for each row

CALL RAISE_APPLICATION_ERROR('auth error');
insert into Dept

values (3, 'EEE');
```