

PES UNIVERSITY

DBMS LAB

WEEK 09 & 10

Name : Suhan B Revankar

SRN : PES2UG19CS412

Section : G Section

Problem Statement1:

Q. Create an employee table which contains employee details and the department he works for.

```
company=# create table employee(name varchar(30),ssn varchar(20) not null,gender char,dname varchar(20),primary key(ssn));
CREATE TABLE
company=# create table employee(dname varchar(20),times int default 0,primary key(dname));
ERROR:  relation "employee" already exists
company=# create table department(dname varchar(20),times int default 0,primary key(dname));
CREATE TABLE
company=# alter table employee add constraint fkey_dname foreign key(dname) references department(dname);
ALTER TABLE
```

Q. Create trigger function for insertion.

```
company=# create function f1()
company=# returns trigger
company=# language plpgsql as
company=# $$
company$# begin
company$# update department set times=times+1 where new.dname=department.dname;
company$# return new;
company$# end;
company$# $$;
CREATE FUNCTION
company=# create trigger f11
company=# after insert on employee
company=# for each row
company=# execute procedure f1();
CREATE TRIGGER
company=# insert into department values('research',0);
INSERT 0 1
company=# insert inot department values('data science',0);
ERROR:  syntax error at or near "inot"
LINE 1: insert inot department values('data science',0);
               ^
company=# insert into department values('data science',0);
INSERT 0 1
company=# select * from department;
  dname      | times
-----+-----
 research    |     0
data science |     0
(2 rows)
```

Q. Working of trigger function after insertion of value.

```
INSERT 0 1
company=# insert into employee values('pk','145','m','data science');
INSERT 0 1
company=# select * from employee;
 name | ssn | gender |  dname
-----+-----+-----+-----
  ram  | 123 | m      | research
 shyam | 124 | m      | research
  sita | 125 | f      | research
   sk  | 126 | m      | data science
   pk  | 145 | m      | data science
(5 rows)

company=# select * from department;
  dname  | times
-----+-----
 research |     3
data science |     2
(2 rows)
```

Q. Working of trigger function after deletion of value.

```
company=# create function f2()
company-# returns trigger
company-# language plpgsql
company-# as $$
company$# begin
company$# update department set times=times-1 where old.dname=department.dname;
company$# return old;
company$# end;
company$# $$;
CREATE FUNCTION
company=# create trigger f22 before delete
company-# on employee for each row
company-# execute procedure f2();
CREATE TRIGGER
company=# delete from employee where ssn='123';
DELETE 1
company=# delete from employee where ssn='126';
DELETE 1
company=# select * from department;
  dname  | times
-----+-----
 research |     2
data science |     1
(2 rows)
```

Problem Statement 2:

Q.Create table of items ordered and summary of table.

```
company=# create table order_item(name varchar(20) not null,quantity int,price int,id varchar(10) not null,primary key(id));
CREATE TABLE
company=# create table summary_table(numberItems int,totalPrice int);
CREATE TABLE
company=# drop table summary table;
```

Q.Create trigger function for update.

```
company=# create function f11()
company=# returns trigger language plpgsql
company=# as $$
company$# begin
company$# update t2 set item_count=item_count+1,price=price+new.quantity*new.price
;
company$# return new;
company$# end;
company$# $$;
CREATE FUNCTION
company=# create trigger f111
company=# after insert
company=# on t1
company=# for each row
company=# execute procedure f11();
CREATE TRIGGER
company=# insert into t1 values('mango',3,200);
```

Q.check trigger function is working or not.

```
company=# insert into t2 values(0,0);
INSERT 0 1
company=# insert into t1 values('mango',3,200);
INSERT 0 1
company=# insert into t1 values('apple',5,900);
INSERT 0 1
company=# select * from t2;
 item_count | price
-----+-----
          2 |  5100
(1 row)

company=#
```