# **DDL STATEMENTS:**

```
Create table person
(login
              varchar(20) primary key,
Password
              varchar(20),
id
              varchar(20),
name
              varchar(20),
address
                      varchar(30),
phno
              numeric(10,0),
              varchar(20)
type
);
Create table leavetype
              varchar(20) primary key,
(Itid
Itname
              varchar(30),
              numeric(3,0));
typecount
Create table contains
(login varchar(20) references person(login),
       varchar(20) references leavetype(ltid));
Itid
Create table authority
       (aid
                      varchar(20) primary key,
       aname
                      varchar(20),
       aaddress
                      varchar(30),
       aphno
                      numeric(10,0));
Create table leave
       (leaveid
                      varchar(20) primary key,
                             varchar(50),
       Reason
       count
                      numeric(3,0),
       apprstatus
                      varchar(20),
       fromdate
                      date,
       todate
                      date,
       aid
                      varchar(20) references authority(aid)
       );
create table apply
       (login varchar(20) references person(login),
       ltid
              varchar(20) references leavetype(Itid),
       leaveid varchar(20) references leave(leaveid));
```

create table specialrequest

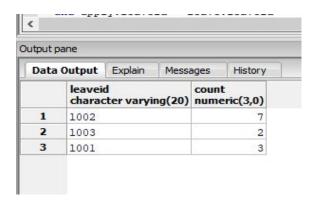
```
(exid varchar(20) primary key,
ecount numeric(3,0));

create table extends
(leaveid varchar(20) references leave(leaveid),
exid varchar(20) references specialrequest(exid));
```

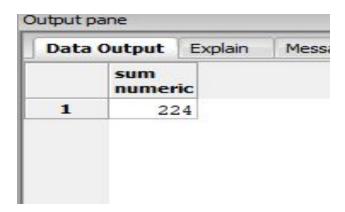
### **DML STATEMENTS:**

```
insert into person values
('user1','dbms1','s001','Sai','nellore',9010100876,'student'),
('user2','dbms2','f001','Nayana','kollam',9020407876,'faculty'),
('user3','dbms3','s002','Ayan','tirchur',9010602904,'student'),
('user4','dbms4','f002','Navneeth','malappuram',8020407876,'faculty');
insert into leavetype values
        ('lt01','casual',14),
        ('lt02', 'maternity', 180),
        ('lt03','medical',15),
        ('lt04','dutyleave',5),
        ('lt05','sabbatical',10);
insert into contains values
        ('user1','lt04'),
        ('user2','lt02'),
        ('user1','lt03');
insert into authority values
        ('a001', 'greeshma', 'kochi', 9443322551),
        ('a003', 'remya', 'allepey', 7443322551),
        ('a002', 'anjali', 'trivandrum', 8909014356);
insert into leave values
        ('I004','maternity',150,'Y','2007-03-10','2007-08-10','a002'),
        ('I003','duty leave',2,'N','2007-07-17','2007-07-19','a001'),
        ('I001','sisters marriage',3,'Y','2019-09-11','2019-09-14','a001'),
        ('I005','jaundice',10,'Y','2006-02-10','2006-02-20','a003'),
        ('I002','viral fever',7,'Y','2018-12-4','2018-12-10','a002');
insert into apply values
        ('user1','lt04','l003'),
        ('user2','It02','I004'),
        ('user1','lt03','l005');
insert into specialrequest values
        ('e001',2),
        ('e002',1);
insert into extends values
        ('I004','e001');
```

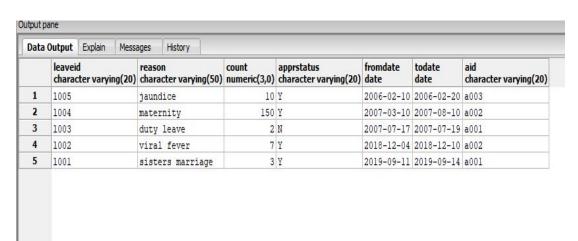
select leaveid, count from leave group by leaveid having count <=7;



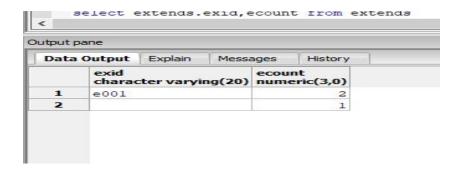
select sum(typecount) from leavetype;



select \* from leave order by fromdate asc;

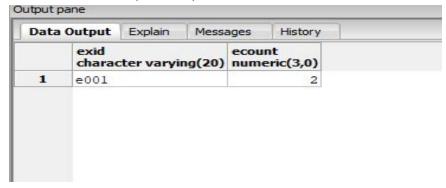


select extends.exid,ecount from extends full outer join specialrequest ON extends.exid=specialrequest.exid;

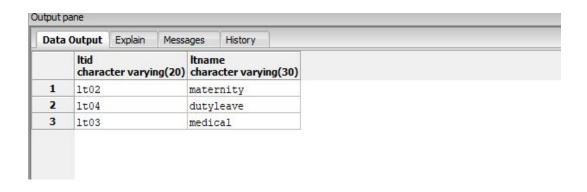


select extends.exid,ecount from extends join specialrequest

ON extends.exid=specialrequest.exid;



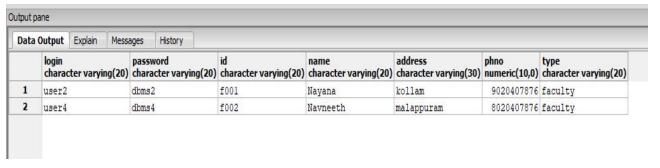
select distinct(leavetype.ltid),leavetype.ltname from leavetype natural join apply,leave where leavetype.ltid = apply.ltid and apply.leaveid = leave.leaveid and apprstatus = 'N' and not extract(year from fromdate) = 2007 or aid ='a002';



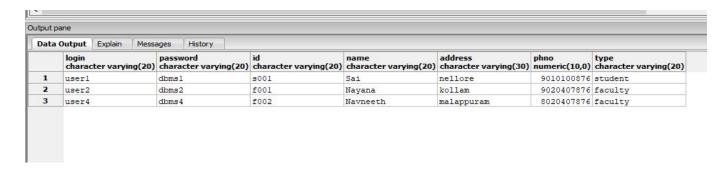
select \* from leave where extract(year from fromdate) > 2007 and extract(year from fromdate) <2019 and count = 7;



# select \* from person where type like 'f%';



# select \* from person where name like '\_a%';

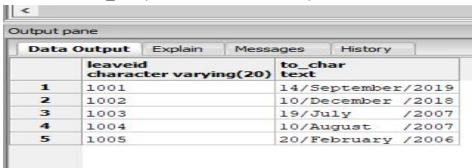


#### select \* from leave

where extract(month from todate) = 9;

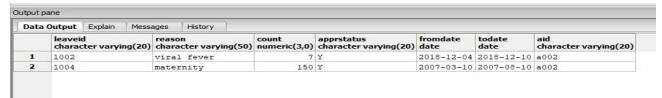


# select leaveid,to\_char(todate,'DD/Month/YYYY') from leave;

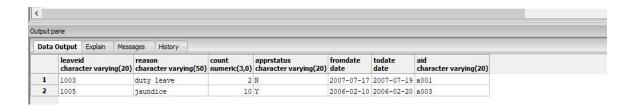


### select \* from leave

where extract(year from fromdate) between 2007 and 2019 and reason in ('maternity','viral fever')



# select \* from leave where extract(year from fromdate) not between 2017 and 2019 and reason not in ('maternity','viral fever')



select distinct(leave.leaveid), authority.aname from leave natural join authority where aid = 'a001' union

select distinct(leave.leaveid),authority.aname from leave natural join authority where aid = 'a003';



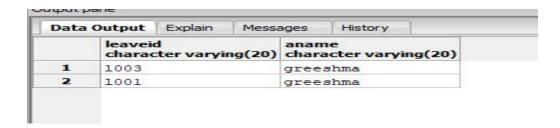
select distinct(leave.leaveid),authority.aname from leave natural join authority where aid = 'a001' union all

select distinct(leave.leaveid),authority.aname from leave natural join authority where aid = 'a003';



select distinct(leave.leaveid),authority.aname from leave natural join authority where aid = 'a001' except

select distinct(leave.leaveid), authority.aname from leave natural join authority where aid = 'a003';

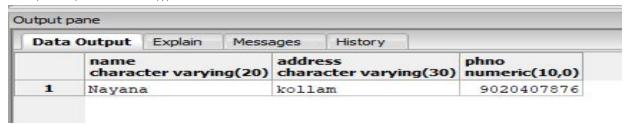


select distinct(leave.leaveid),authority.aname from leave natural join authority where aid = 'a001' intersect

select distinct(leave.leaveid), authority.aname from leave natural join authority where aid = 'a003';



select name,address,phno from person where login = (select login from apply where leaveid = ( select leaveid from leave where count = (select max(count) from leave )))



SELECT name, address, phno

FROM person

WHERE NOT EXISTS (SELECT login FROM apply WHERE leaveid in ( select leaveid from leave));

