```
create schema alloc;
set search_path to alloc;
create table INSTITUTE(
INST_Id CHAR(3),
INAME VARCHAR(20) NOT NULL,
TYPE VARCHAR(20) NOT NULL,
STATE VARCHAR(20),
CITY VARCHAR(20),
PRIMARY KEY(INST_ID));
create table STUDENTS(
      S_ID CHAR(15) PRIMARY KEY,
      F_Name VARCHAR(30) NOT NULL,
      L_Name VARCHAR(30),
      Marks integer,
      State VARCHAR(40),
      City VARCHAR(40),
      Gender VARCHAR );
create table COURSES
c_code VARCHAR(20) PRIMARY KEY,
c_name VARCHAR(40),
cutoff INTEGER NOT NULL
);
create table OFFERS
cs_id VARCHAR(20) REFERENCES COURSES(c_code)
ON DELETE CASCADE ON UPDATE CASCADE,
inst_id CHAR(3) REFERENCES INSTITUTE(INST_Id)
ON DELETE CASCADE ON UPDATE CASCADE,
toatal seats INTEGER NOT NULL
);
```

# ALTER TABLE ONLY offers ADD CONSTRAINT offers\_pkey PRIMARY KEY (inst\_id,cs\_id);

```
create table REGISTERS
Stu id CHAR(15) references students (S_ID)
      on delete cascade on update cascade,
Cour_id VARCHAR(20),
Ins_id CHAR(3),
Preference integer,
Reg_date date NOT NULL,
PRIMARY KEY (Stu_id,Cour_id,Ins id)
);
ALTER TABLE ONLY registers
ADD CONSTRAINT registers_pid_fkey FOREIGN KEY (Cour_id,ins_id) REFERENCES
offers(inst_id,cs_id) ON DELETE CASCADE ON UPDATE CASCADE;
create table CHOICESET
STUD ID CHAR(15),
C_ID CHAR(20),
INSTI_ID CHAR(3) ,
PRIMARY KEY (STUD_ID, C_ID, INSTI_ID)
);
ALTER TABLE ONLY choiceset
ADD CONSTRAINT choiceset_pid_fkey FOREIGN KEY (STUD_ID , C_ID , INSTI_ID)
REFERENCES registers (Stu_id,Cour_id,Ins_id) ON DELETE CASCADE ON UPDATE
CASCADE;
```

```
create table admitted(
adm date DATE,
stud_id char(15),
c_id varchar(20),
ins id char(3),
PRIMARY KEY (adm_date, stud_id , c_id , ins_id)
);
ALTER TABLE ONLY admitted
ADD CONSTRAINT admitted_pid_fkey FOREIGN KEY (stud_id , c_id , ins_id) REFERENCES
choiceset(STUD_ID, C_ID, INSTI_ID) ON DELETE CASCADE ON UPDATE CASCADE;
create table VERIFICATION_CENTER(
Incharge VARCHAR(20),
stu_id CHAR(15),
cou_id VARCHAR(20),
ins_id CHAR(3)
);
ALTER TABLE ONLY verification center
ADD CONSTRAINT verification_pid_fkey FOREIGN KEY (stu_id , cou_id , ins_id)
REFERENCES choiceset(STUD_ID , C_ID , INSTI_ID) ON DELETE CASCADE ON UPDATE
CASCADE;
//some changes in institute table
Alter table institute add state varchar(20);
Alter table institute drop seats; // nice !
// some changes in course and offers table
Alter table courses drop cutoff;
Alter table offers add cutoff INTEGER NOT NULL;
alter table courses alter column c_name TYPE varchar(70);
```

#### #insertion in institute table - 21 values

```
insert into institute values('101','IIT BOMBAY','IIT','MUMBAI','MAHARASHTRA');
insert into institute values('102','IIT DELHI','IIT','DELHI','DELHI');
insert into institute values('103','IIT KHARAGPUR','IIT','KHARAGPUR','WEST BENGAL');
insert into institute values('104','IIT KANPUR','IIT','KANPUR','UTTAR PRADESH');
insert into institute values('105','IIT BHU','IIT','VARANASI','UTTAR PRADESH');
insert into institute values('106','IIT PATNA','IIT','PATANA','BIHAR');
insert into institute values('107','IIT ROORKEE','IIT','ROORKEE','UTTARAKHAND');
insert into institute values('108','IIT ISM DHANBAD','IIT','DHANBAD','JHARKHAND');
insert into institute values('109','IIT HYDERABAD','IIT','HYDERABAD','TELANGANA');
insert into institute values('110','IIT GANDHINAGAR','IIT','GANDHINAGAR','GUJRAT');
insert into institute values('201','NIT TRICHY','NIT','TIRUCHIRAPALLI','TAMILNADU');
insert into institute values('202','SVNIT SURAT','NIT','SURAT','GUJRAT');
insert into institute values('206', 'MANIT BHOPAL', 'NIT', 'BHOPAL', 'MADHYA PRADESH');
insert into institute values('203','VNIT NAGPUR','NIT','NAGPUR','MAHARASHTRA');
insert into institute values('204','NIT WARANGAL','NIT','WARANGAL','TELANGANA');
insert into institute values('205','NIT ROURKELA','NIT','ROURKELA','ODISHA');
insert into institute values('301','IIIT VADODARA','IIIT','GANDHINAGAR','GUJRAT');
insert into institute values('302','IIIT GWALIOR','IIIT','GWALIOR','MADHYA PRADESH');
insert into institute values('303','IIIT PUNE','IIIT','PUNE','MAHARASHTRA');
insert into institute values('304','IIIT KANCHIPURAM','IIIT','KANCHIPURAM','TAMILNADU');
insert into institute values('305','IIIT ALLAHABAD','IIIT','PRAYAGRAJ','UTTAR PRADESH');
# inserting values in courses table - 5 values
insert into courses values('CSE','COMPUTER SCIENCE ENGINEERING');
insert into courses values('IT','INFORMATION TECHNOLOGY');
insert into courses values ('ECE', 'ELECTRONICS AND COMMUNICATION ENGINEERING');
insert into courses values('ME', 'MECHANICAL ENGINEERING');
```

insert into courses values('EE','ELECTRICAL ENGINEERING');

## #inserting into offers table - 76

```
insert into offers values('CSE','101','40',250);
insert into offers values('ME','101','40',200);
insert into offers values('EE','101','40',170);
insert into offers values('ECE','101','40',180);
insert into offers values('CSE','102','40',240);
insert into offers values('ME','102','40',190);
insert into offers values('EE','102','40',168);
insert into offers values('ECE','102','40',178);
insert into offers values('CSE','103','40',235);
insert into offers values('ME','103','40',185);
insert into offers values('EE','103','40',165);
insert into offers values('ECE','103','40',175);
insert into offers values('CSE','104','40',232);
insert into offers values('ME','104','40',180);
insert into offers values('EE','104','40',162);
insert into offers values('ECE','104','40',172);
insert into offers values('CSE','105','40',228);
insert into offers values('ME','105','40',178);
insert into offers values('EE','105','40',160);
insert into offers values('ECE','105','40',170);
insert into offers values('CSE','106','60',225);
insert into offers values('ME','106','60',175);
insert into offers values('EE','106','60',160);
insert into offers values('CSE','107','60',225);
insert into offers values('ME','107','60',176);
insert into offers values('EE','107','60',158);
insert into offers values('CSE','108','40',222);
insert into offers values('ME','108','40',172);
insert into offers values('EE','108','40',155);
insert into offers values('ECE','108','40',165);
insert into offers values('CSE','109','40',220);
insert into offers values('ME','109','40',170);
insert into offers values('EE','109','40',152);
```

```
insert into offers values('ECE','109','40',160);
insert into offers values('CSE','110','40',220);
insert into offers values('ME','110','40',100);
insert into offers values('EE','110','40',150);
insert into offers values('ECE','110','40',155);
insert into offers values('CSE','201','50',220);
insert into offers values('ME','201','50',180);
insert into offers values('EE','201','50',160);
insert into offers values('ECE','201','50',170);
insert into offers values('CSE','202','40',190);
insert into offers values('IT','202','40',170);
insert into offers values('ME','202','40',160);
insert into offers values('EE','202','40',140);
insert into offers values('ECE','202','40',150);
insert into offers values('CSE','203','50',200);
insert into offers values('ME','203','50',170);
insert into offers values('EE','203','50',155);
insert into offers values('ECE','203','50',160);
insert into offers values('CSE','204','50',210);
insert into offers values('ME','204','50',175);
insert into offers values('EE','204','50',150);
insert into offers values('ECE','204','50',165);
insert into offers values('CSE','205','40',205);
insert into offers values('IT','205','40',180);
insert into offers values('ME','205','40',165);
insert into offers values('EE','205','40',148);
insert into offers values('ECE','205','40',168);
insert into offers values('CSE','206','50',195);
insert into offers values('ME','206','50',166);
insert into offers values('EE','206','50',145);
insert into offers values('ECE','206','50',162);
insert into offers values('CSE','301','80',170);
insert into offers values('IT','301','80',150);
```

```
insert into offers values('CSE','302','60',185); insert into offers values('IT','302','60',175); insert into offers values('ECE','302','60',150); insert into offers values('CSE','303','80',160); insert into offers values('IT','303','80',140); insert into offers values('CSE','304','80',180); insert into offers values('IT','304','80',170); insert into offers values('CSE','305','60',190); insert into offers values('IT','305','60',180); insert into offers values('ECE','305','60',160);
```

# # Inserting into Students table - 24

INSERT INTO students VALUES(20171, 'PRAYAGRAJ','M');	'ABHISHEK', 'SHARMA',240,'UTTAR PRADESH',
INSERT INTO students VALUES(20172, , 'GWALIOR', 'M');	'AAYUSH', 'DHEEMER',230,'MADHYA PRADESH'
INSERT INTO students VALUES(20173,	'AMAN', 'SINGH',190,'GUJARAT', 'SURAT', 'M');
INSERT INTO students VALUES(20174, 'BHOPAL','M');	'SHASHANK', 'GUPTA',180,'MADHYA PRADESH',
INSERT INTO students VALUES(20175,	'SAURABH', 'SINGH',188, 'UTTAR PRADESH',
'GORAKHPUR' ,'M'); INSERT INTO students VALUES(20176,	'DEV', 'DK B0SE', 155 ,'JHARKHAND' ,
'RANCHI','M');	,, _,, _,, _,, _,, _,, _,, _,, _,
INSERT INTO students VALUES(20177,	'ANJALI', 'PRIYA', 177 ,'BIHAR' , 'PATNA' ,'F');
INSERT INTO students VALUES(20178, ,'M');	'VIKAS', 'sharma',173,'RAJASTHAN' , 'JAIPUR'
INSERT INTO students VALUES(20179, 'MUMBAI', 'M');	'PRAJWAL', 'ROTHE', 178,'MAHARASHTRA',
INSERT INTO students VALUES(20180,	'BHAVESH', 'PATEL', 188 ,'MADHYA PRADESH' ,
'BHUSAVAL' ,'M');	
INSERT INTO students VALUES(20181,	'MEENAL', 'SALVI', 175 ,'RAJASTHAN' ,
'UDAIPUR' ,'F');	
INSERT INTO students VALUES (20182,	'ANUSHA' , 'GUPTA' , 152 , 'MADHYA
PRADESH', 'JABALPUR', 'F');	

```
INSERT INTO students VALUES (20183,
                                  'VAISHALI', 'DUBEY', 148, 'UTTAR
PRADESH', 'BANARAS', 'F');
INSERT INTO students VALUES (20184,
                                  'SHIVANGI', 'KAPADIA', 163, 'GUJARAT',
'GANDHINAGAR', 'F');
INSERT INTO students VALUES (20185,
                                  'KSHITIZ', 'GANGWAR', 128, 'DELHI',
'GURUGRAM', 'M');
INSERT INTO students VALUES (20186,
                                  'SAWAI', 'JAIN', 179, 'TAMILNADU',
'KANCHIPURAM',
                'M' );
INSERT INTO students VALUES (20187,
                                  'PREETI', 'YADAV', 229, 'UTTAR
PRADESH', 'LUCKNOW', 'F');
INSERT INTO students VALUES (20188,
                                  'KESHAV', 'PUROHIT', 185,
'MAHARASHTRA', 'MUMBAI', 'M');
                                  'PRAKHAR', 'GUPTA', 166,
INSERT INTO students VALUES (20189,
'CHHATISGARH', 'RAIPUR', 'M');
INSERT INTO students VALUES (20190,
                                  'JOSHUA', 'PODUKU', 220,
'MAHARASHTRA', 'PUNE', 'M');
INSERT INTO students VALUES (20191,
                                  'VAIDEHI', 'VAISHNAV', 191, 'GUJARAT',
'AHMEDABAD', 'F');
INSERT INTO students VALUES (20192,
                                  'SHUBHAM', 'SHARMA', 100, 'UTTAR
PRADESH', 'FARUKHABAD', 'M');
INSERT INTO students VALUES (20193,
                                  'ANUPMA', 'GUPTA', 80, 'UTTAR
PRADESH', 'AGRA', 'F');
                                  'ALOK', 'PANCHAL', 97, 'MADHYA
INSERT INTO students VALUES (20194,
PRADESH', 'JABALPUR', 'M');
```

# \Changes in registers Alter table registers drop constraint registers\_pid\_fkey; ALTER TABLE ONLY registers ADD CONSTRAINT myfkey FOREIGN KEY (ins\_id,cour\_id ) REFERENCES offers(inst\_id,cs\_id) ON DELETE CASCADE ON UPDATE CASCADE;

### #inserting into registers table - 47

```
insert into registers values ( 20171 , 'CSE' , 101 , 1 , '2017-06-15' ); insert into registers values ( 20171 , 'ME' , 101 , 2 , '2017-06-15' ); insert into registers values ( 20172 , 'ME' , 101 , 1 , '2017-06-17' ); insert into registers values ( 20172 , 'ME' , 102 , 2 , '2017-06-17' );
```

```
insert into registers values ( 20173, 'CSE', 104, 1, '2017-06-17');
insert into registers values ( 20173, 'ME' , 104, 2, '2017-06-17' );
insert into registers values ( 20174, 'CSE', 305, 1, '2017-06-16');
insert into registers values ( 20174, 'CSE' , 304, 2, '2017-06-16');
insert into registers values ( 20175, 'ME' , 102, 1, '2017-06-16');
insert into registers values ( 20175, 'ME' , 103, 2, '2017-06-16' );
insert into registers values ( 20176, 'EE', 103, 1, '2017-06-17');
insert into registers values ( 20176, 'IT', 301, 2, '2017-06-17');
insert into registers values ( 20177, 'CSE' , 304, 1, '2017-06-17' );
insert into registers values ( 20177, 'CSE' , 301, 2, '2017-06-17' );
insert into registers values ( 20178, 'CSE' , 204, 1, '2017-06-15' );
insert into registers values ( 20178, 'IT' , 301, 2, '2017-06-15' );
insert into registers values ( 20179, 'EE' , 105, 1, '2017-06-15' );
insert into registers values ( 20179, 'CSE' , 301, 2, '2017-06-15' );
insert into registers values ( 20180, 'CSE' , 202, 1, '2017-06-16' );
insert into registers values ( 20180, 'ME' , 201, 2, '2017-06-16' );
insert into registers values ( 20181 , 'ME' , 104 , 1 , '2017-06-17'
insert into registers values ( 20181, 'EE' , 102, 2, '2017-06-17' );
insert into registers values ( 20182, 'ECE' , 104, 1, '2017-06-15' );
insert into registers values ( 20182, 'EE' , 204, 2, '2017-06-15 ' );
insert into registers values ( 20183, 'ECE' , 201, 1, '2017-06-16' );
insert into registers values ( 20183, 'IT', 303, 2, '2017-06-16');
insert into registers values ( 20184, 'CSE', 109, 1, '2017-06-15');
insert into registers values ( 20184, 'ECE' , 109, 2, '2017-06-15' );
insert into registers values ( 20185, 'ECE' , 305, 1, '2017-06-16' );
insert into registers values ( 20185, 'EE', 202, 2, '2017-06-16');
```

```
insert into registers values ( 20186, 'CSE', 107, 1, '2017-06-15');
insert into registers values ( 20186, 'ME' , 107, 2, '2017-06-15');
insert into registers values ( 20187, 'CSE' , 101, 1, '2017-06-17' );
insert into registers values ( 20187, 'CSE' , 107, 2, '2017-06-17' );
insert into registers values ( 20188, 'ME' , 104, 1, '2017-06-15 ');
insert into registers values ( 20188, 'ECE' , 103, 2, '2017-06-15');
insert into registers values ( 20189, 'CSE' , 205, 1, '2017-06-16' );
insert into registers values ( 20189 , 'ECE' , 205 , 2 , '2017-06-16 ' );
insert into registers values ( 20190 , 'CSE' , 104 , 1 , ' 2017-06-15'
insert into registers values ( 20190 , 'ME' , 101 , 2 , '2017-06-15' );
insert into registers values ( 20191, 'CSE' , 108, 1, '2017-06-17' );
insert into registers values ( 20191, 'ME', 108, 2, '2017-06-17');
insert into registers values ( 20192, 'CSE', 303, 1, '2017-06-15');
insert into registers values ( 20192, 'IT', 303, 2, '2017-06-15');
insert into registers values ( 20193, 'IT' , 301, 1, '2017-06-17'
insert into registers values ( 20193, 'IT', 303, 2, '2017-06-17');
insert into registers values ( 20194 , 'IT' , 303 , 1 , '2017-06-15'
insert into registers values ( 20194, 'EE' , 206, 2, '2017-06-15' );
```

```
// changes in verification_center
Alter table verification_center add center_id character(3);
ALTER TABLE ONLY verification_center
ADD CONSTRAINT verification_center_pid_fkey FOREIGN KEY (center_id) REFERENCES institute( INST_ID) ON DELETE CASCADE ON UPDATE CASCADE;
```

```
// entries into choiceset -21
insert into choiceset values (20171, 'ME', 101);
insert into choiceset values ( 20172, 'ME' , 102);
insert into choiceset values (20173, 'ME', 104);
insert into choiceset values (20174, 'CSE', 304);
insert into choiceset values ( 20175, 'ME', 103);
insert into choiceset values ( 20176, 'IT', 301);
insert into choiceset values (20177, 'CSE', 301);
insert into choiceset values (20178, 'IT', 301);
insert into choiceset values (20179, 'CSE', 301);
insert into choiceset values (20180, 'ME', 201);
insert into choiceset values( 20181, 'EE', 102);
insert into choiceset values (20182, 'EE', 204);
insert into choiceset values (20183, 'IT', 303);
insert into choiceset values (20184, 'ECE', 109);
insert into choiceset values (20185, 'EE', 202);
insert into choiceset values (20186, 'ME', 107);
insert into choiceset values (20187, 'CSE', 107);
insert into choiceset values (20188, 'ME', 104);
insert into choiceset values (20189, 'ECE', 205);
insert into choiceset values (20190, 'ME', 101);
insert into choiceset values (20191, 'ME', 108);
```

```
insert into admitted values ('2017-09-19', 20172, 'ME', 102);
insert into admitted values( '2017-09-20', 20173, 'ME', 104);
insert into admitted values( '2017-09-25', 20174, 'CSE', 304);
insert into admitted values ('2017-09-05', 20175, 'ME', 103);
insert into admitted values ( '2017-09-09', 20176, 'IT', 301);
insert into admitted values('2017-09-13', 20177, 'CSE', 301);
insert into admitted values ('2017-09-22', 20178, 'IT', 301);
insert into admitted values ('2017-09-07', 20179, 'CSE', 301);
insert into admitted values ('2017-09-28', 20180, 'ME', 201);
insert into admitted values ('2017-09-12', 20181, 'EE', 102);
insert into admitted values ('2017-09-15', 20182, 'EE', 204);
insert into admitted values ('2017-09-15', 20183', 'IT', 303);
insert into admitted values( '2017-09-03', 20184, 'ECE', 109);
insert into admitted values ('2017-09-18', 20185, 'EE', 202);
insert into admitted values ('2017-09-03',20186', 'ME', 107);
insert into admitted values ('2017-09-03',20187', 'CSE', 107);
insert into admitted values ('2017-09-03',20188', 'ME', 104);
drop table verification_center;
create table verification center
center_id char(3) REFERENCES INSTITUTE(INST_Id)
ON DELETE CASCADE ON UPDATE CASCADE,
incharge varchar(20)
);
//inserting into verification center values
insert into verification_center values(101, 'J.P.KELKAR');
insert into verification center values(203, 'GANESH P GAITONDE');
insert into verification center values(104, 'S.P.MISHRA');
insert into verification center values(305, K.M.SHARMA');
insert into verification_center values(110,'R.L.SHAH');
insert into verification_center values(202, 'S.T.THAKKAR');
insert into verification center values(102, 'A..S.KEJRIWAL');
insert into verification center values(110, 'R.L.SHAH');
insert into verification_center values(206,'G.J.GUPTA');
```

```
insert into verification_center values(302, 'H.R.KAMALNATH');
insert into verification_center values(103,'K.T.MUKHERJI');
insert into verification_center values(204, 'N.T.RAMARAO');
insert into verification center values(109, 'P.A.KALANIDHI');
insert into verification center values(201, 'A.B.SHETTY');
insert into verification_center values(304,'K.L.RAHUL');
insert into verification_center values(106, 'SUNNY PRAKASH');
\\Queries
1.list the name of the branch and their avg cutoff of the year;
CREATE VIEW branch_wise_cutoff AS
select c_code,c_name,avgCutoff from COURSES join (select cs_id,avg(cutoff) as AvgCutoff
from offers group by cs id) AS R1
on COURSES.c_code = R1.cs_id;
select * from branch_wise_cutoff;
2. Show the gender wise registration count.
select gender, count(s_id) as registration from STUDENTS group by gender;
3. name of the students who registers for less than 2 preference
select s_id,f_name,l_name from students as s
join
(
select distinct stu id from registers where preference='1'
select distinct stu_id from registers where preference='2'
) as r1
on
s.s_id = r1.stu_id
4.select details of student which registers for colleges but didn't get any seat.
select * from students as s
join
(select distinct stu_id from registers
```

```
except
select distinct stud_id from choiceset) as r1
on r1.stu_id = s.s_id;
5. select the details of students which got their first preference colleges.
select f_name,stud_id,cour_id,insti_id from students as s
join
(select stud_id,cour_id,insti_id from registers join choiceset
stud_id = stu_id and c_id = cour_id and ins_id = insti_id
where preference = 1) as r1
on s.s_id = r1.stud_id;
**(Note: please execute queries which are mentioned below because i have inserted a
verification center value twice)
delete from verification_center where center_id='110';
insert into verification_center values('110','R.L.SHAH');
6.List the details of verification centers which are feasible for students of particular state.(state =
gujrat).
select center_id,iname as c_name,incharge,city,state
from verification_center join institute
on center_id = inst_id
where state ='GUJRAT';
```

7.show the details of students whom college is alloted but does not take admission.

```
CREATE VIEW does not take admission AS
select s_id,f_name||' '||I_name as name,gender,city,state from
students as s
ioin
select stud_id from choiceset
except
select stud id from admitted) as r1
on s.s id = r1.stud id;
SELECT * from does_not_take_admission;
//change***
INSERT INTO students VALUES (20195, 'ANAND', 'MISHRA', 155, 'TELANGANA',
'WARANGAL', 'M');
INSERT INTO students VALUES (20196, 'BHAVANA', 'KURRA', 163, 'MADHYA
PRADESH', 'SAGAR', 'F');
8.show the details of students and institute who got admitted in the institute which is in their
own state.
select s_id,f_name||' '||I_name as name,gender,s.state from students as s
join
select stud_id,ins_id,iname,type,state from institute join admitted
on
inst_id = ins_id
) as i
on s.s id = i.stud id
where s.state = i.state;
 9.no of seats left in each institute of each course after admission.
CREATE VIEW seat left AS
 select inst_id,iname as institute,cs_id,seat_left from institute natural join
 select inst_id,cs_id,toatal_seats-fs as seat_left
from
 (select inst_id,cs_id,toatal_seats,COALESCE(r1.count,0) as fs
```

```
from
offers left join
(select ins_id,c_id,count(stud_id) from admitted group by (c_id,ins_id)) as r1
on inst_id=ins_id and c_id=cs_id) as r2) as r3
order by inst_id;
select * from seat_left;
10. Show the institute name, type and coursewise cutoff where coursewise cutoff is maximum.
select r4.inst_id,iname,r4.cs_id,max_cutoff from
institute
join
select inst_id,r1.cs_id,max_cutoff from
(select cs_id,max(cutoff) as max_cutoff from offers group by cs_id) as r1
join
(select cs_id,inst_id,cutoff from offers) as r2
on
r1.cs_id = r2.cs_id where cutoff = max_cutoff
) as r4
on
institute.inst_id = r4.inst_id;
```

\\change

Alter table verification\_center add primary key (center\_id);