Introduction to Database Project

Fall 2020-21

**Project Name: Art School Management System**

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**Introduction**

An art school is an educational institution with a primary focus on the visual arts, including fine art – especially illustration, painting, photography, sculpture, and graphic design. Art schools can offer elementary, secondary, post-secondary, or undergraduate programs, and can also offer a broad-based range of programs. In art school management is a web base management system where we can see the teacher information easily. On the other hand, who is the principal of this school. Student information can easily find out from here and their parent relationship. Student can see their tuition fees and other fees in their website. And they can know which class they are & subjects also. Teacher also know easily their choosing subjects and class. This is a simple management system for everyone so that they can easily read.

**Case Study:**

Art school management has a strong management for the whole system. The whole system manages by a Principal. The principal as identify as p\_id,p\_name,phone. Principal hires the teacher as t\_name,t\_id,Gender,address,Phone. And principal enrolls student which as S\_id,S\_name,Phone,Gender,Branch,Date\_of\_birth,Academic\_date.Students pays as Tuition\_fees\_paid,date\_of\_receipt,ReceiptNo,development\_fees\_paid,other\_fees\_paid.Teacher teaches subjects as su\_id,Su\_name,C\_id. And Teacher is assigned to class as c\_id,c\_name,section.In school students need to identify their parents as pa\_name,pa\_id,address,phone,relationship\_with\_address,gender.

**Er Diagram**

Diagram, schematic

Description automatically generated

**Normalization**

**Takes** (C\_id,C\_name,Section,S\_id,S\_name,phone,Gender, Academic\_Year,date\_of birth,Branch)

1NF:

phone multivalued attribute

2NF:

C\_id,C\_name,Section

S\_id,S\_name,phone,Gender, Academic\_Year,date\_of birth,Branch

CS\_id,C\_id, S\_id

3NF:

C\_id,C\_name,Section

S\_id,S\_name,phone,Gender, Academic\_Year,date\_of birth,Branch

CS\_id,C\_id, S\_id

no transitive dependency

Table:

C\_id,C\_name,Section

S\_id,S\_name,phone,Gender, Academic\_Year,date\_of birth,Branch

CS\_id,C\_id, S\_id

**Is assingned to**(C\_id,C\_name,Section,T\_id,T\_name,phone,Gender,Address)

1NF:

phone multivalued attribute

2NF:

C\_id,C\_name,Section

T\_id,T\_name,phone,Gender,Address

CT\_id,C\_id, T\_id

3NF:

C\_id,C\_name,Section

T\_id,T\_name,phone,Gender,Address

CT\_id,C\_id, T\_id

no transitive dependency

Table:

C\_id,C\_name,Section

T\_id,T\_name,phone,Gender,Address

CT\_id,C\_id, T\_id

**Pays** (ReceiptNo,Tution\_fees\_paid,Date\_of\_Reciept, development\_fees\_paid,Other\_fees\_paid, S\_id,S\_name,phone,Gender, Academic\_Year,date\_of birth,Branch)

1NF:

phone multivalued attribute

2NF:

ReceiptNo,Tution\_fees\_paid,Date\_of\_Reciept, development\_fees\_paid,Other\_fees\_paid

S\_id,S\_name,phone,Gender, Academic\_Year,date\_of birth,Branch

RS\_id, ReceiptNo, S\_id

3NF:

ReceiptNo,Tution\_fees\_paid,Date\_of\_Reciept, development\_fees\_paid,Other\_fees\_paid

S\_id,S\_name,phone,Gender, Academic\_Year,date\_of birth,Branch

RS\_id, ReceiptNo, S\_id

DR\_id,ReceiptNo, Date\_of\_Reciept

Table:

ReceiptNo,Tution\_fees\_paid,Date\_of\_Reciept, development\_fees\_paid,Other\_fees\_paid

S\_id,S\_name,phone,Gender, Academic\_Year,date\_of birth,Branch

DR\_id,ReceiptNo, Date\_of\_Reciept

**Enrols** (S\_id,S\_name,phone,Gender, Academic\_Year,date\_of birth,Branch,P\_Id,Phone,P\_Name)

1NF:

phone multivalued attribute

2NF:

S\_id,S\_name,phone,Gender, Academic\_Year,date\_of birth,Branch,P\_Id

P\_Id,Phone,P\_Name

3NF:

S\_id,S\_name,phone,Gender, Academic\_Year,date\_of birth,

Branch,P\_Id

P\_Id,Phone,P\_Name

no transitive dependency

Table:

S\_id,S\_name,phone,Gender, Academic\_Year,date\_of birth,Branch

P\_Id,Phone,P\_Name

**Hires** (P\_Id,Phone,P\_Name, T\_id,T\_name,phone,Gender,Address)

1NF:

phone multivalued attribute

2NF:

P\_Id,Phone,P\_Name

T\_id,T\_name,phone,Gender,Address, P\_Id

3NF:

P\_Id,Phone,P\_Name

T\_id,T\_name,phone,Gender,Address,P\_Id

no transitive dependency

Table:

P\_Id,Phone,P\_Name

T\_id,T\_name,phone,Gender,Address,P\_Id

**Teaches**(T\_id,T\_name,phone,Gender,Address,C\_ID,Su\_Name,Su\_ID)

1NF:

phone multivalued attribute

2NF:

Su\_ID,Su\_Name, C\_ID, T\_id

T\_id,T\_name,phone,Gender,Address

3NF:

Su\_ID,Su\_Name, C\_ID, T\_id

T\_id,T\_name,phone,Gender,Address

no transitive dependency

Table:

Su\_ID,Su\_Name, C\_ID, T\_id

T\_id,T\_name,phone,Gender,Address

**Adds**(Su\_ID,Su\_Name, C\_ID, P\_Id,Phone,P\_Name)

1NF:

phone multivalued attribute

2NF:

Su\_ID,Su\_Name, C\_ID, P\_Id

P\_Id,Phone,P\_Name

3NF:

Su\_ID,Su\_Name, C\_ID, P\_Id

P\_Id,Phone,P\_Name

no transitive dependency

Table:

Su\_ID,Su\_Name, C\_ID, P\_Id

P\_Id,Phone,P\_Name

**Have**(S\_id,S\_name,phone,Gender, Academic\_Year,date\_of birth,

Branch,Pa ID,pa\_Name,Address,phone,Relationship\_with\_student)

1NF:

phone multivalued attribute

2NF:

S\_id,S\_name,phone,Gender, Academic\_Year,date\_of birth,Branch, Pa ID

Pa ID,pa\_Name,Address,phone,Relationship\_with\_student

3NF:

S\_id,S\_name,phone,Gender, Academic\_Year,date\_of birth,Branch, Pa ID

Pa ID,pa\_Name,Address,phone,Relationship\_with\_student

no transitive dependency

Table:

S\_id,S\_name,phone,Gender, Academic\_Year,date\_of birth,Branch, Pa ID

Pa ID,pa\_Name,Address,phone,Relationship\_with\_student

**Total Table:**

~~C\_id,C\_name,Section~~

~~S\_id,S\_name,phone,Gender, Academic\_Year,date\_of birth,Branch~~

CS\_id,C\_id, S\_id

C\_id,C\_name,Section

~~T\_id,T\_name,phone,Gender,Address~~

CT\_id,C\_id, T\_id

ReceiptNo,Tution\_fees\_paid,Date\_of\_Reciept, development\_fees\_paid,Other\_fees\_paid

~~S\_id,S\_name,phone,Gender, Academic\_Year,date\_of birth,Branch~~

DR\_id,ReceiptNo, Date\_of\_Reciept

~~S\_id,S\_name,phone,Gender, Academic\_Year,date\_of birth,Branch~~

~~P\_Id,Phone,P\_Name~~

~~P\_Id,Phone,P\_Name~~

T\_id,T\_name,phone,Gender,Address,P\_Id

~~Su\_ID,Su\_Name, C\_ID, T\_id~~

~~T\_id,T\_name,phone,Gender,Address~~

Su\_ID,Su\_Name, C\_ID, T\_id

~~T\_id,T\_name,phone,Gender,Address~~

Su\_ID,Su\_Name, C\_ID, P\_Id

P\_Id,Phone,P\_Name

S\_id,S\_name,phone,Gender, Academic\_Year,date\_of birth,Branch, Pa ID

Pa ID,pa\_Name,Address,phone,Relationship\_with\_student

**Final Table:**

1. CS\_id,C\_id, S\_id

2. C\_id,C\_name,Section

3. CT\_id,C\_id, T\_id

4. ReceiptNo,Tution\_fees\_paid,Date\_of\_Reciept, development\_fees\_paid,Other\_fees\_paid

5. DR\_id,ReceiptNo, Date\_of\_Reciept

6. T\_id,T\_name,phone,Gender,Address,P\_Id

7. Su\_ID,Su\_Name, C\_ID, T\_id

8. Su\_ID,Su\_Name, C\_ID, P\_Id

9. P\_Id,Phone,P\_Name

10. S\_id,S\_name,phone,Gender, Academic\_Year,date\_of \_birth, Pa\_ID

11. Pa ID,pa\_Name,Address,phone,Relationship\_with\_student

TABLE CREATION WITH CONSTRAINS:

1.CS TABLE:

create table cs

(

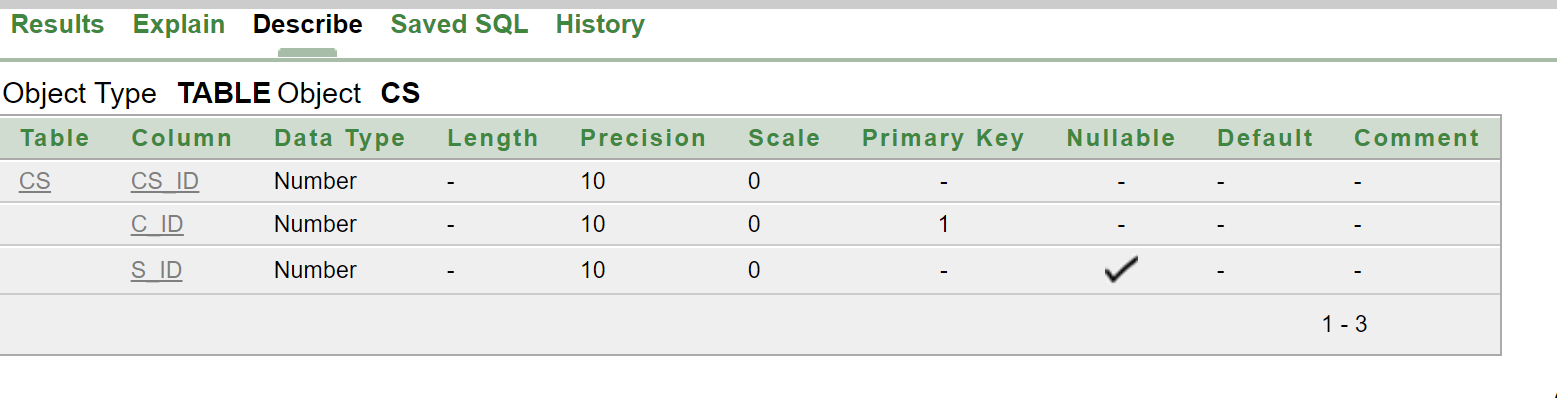
cs\_id number(10) not null,

c\_id number(10) primary key,

s\_id number(10) unique

)

desc cs;



2.CLASS TABLE:

create table class

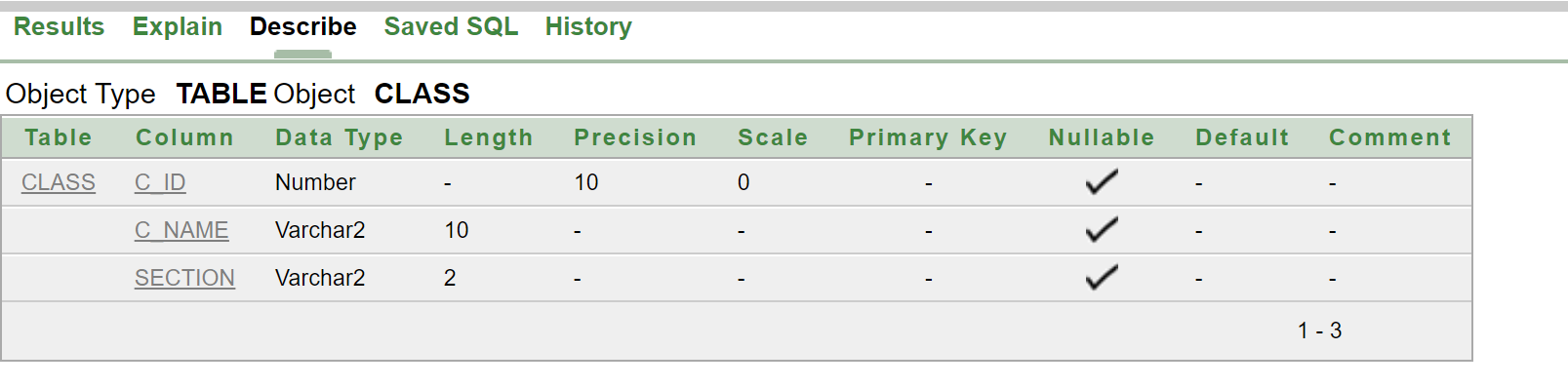
(

c\_id number(10) constraint cs\_c\_id\_fk references cs (c\_id),

c\_name varchar2(10),

section varchar2(2)

)

desc class; 

**3.CT TABLE:**

create table ct

(

c\_id number(10) primary key,

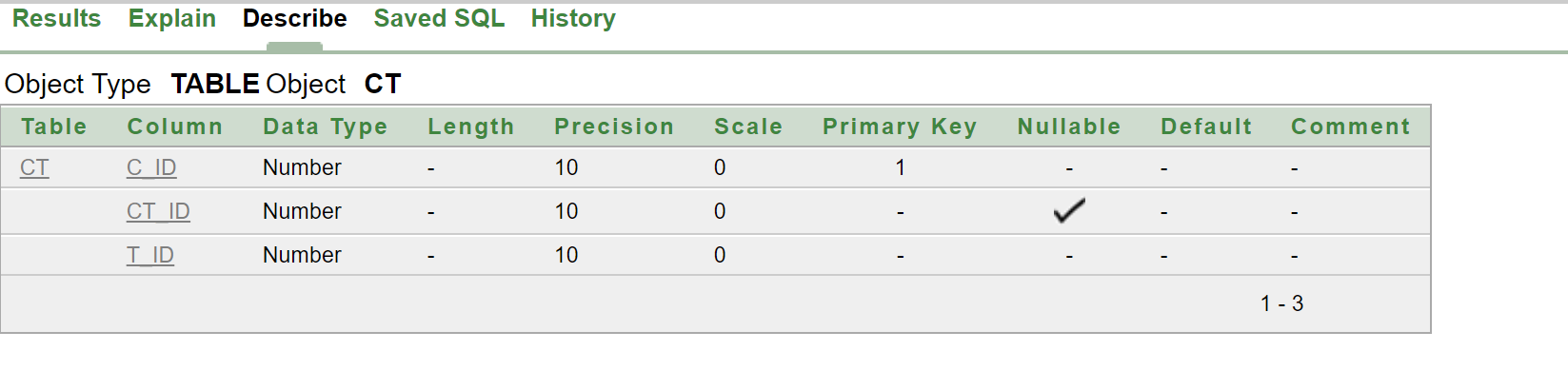
FOREIGN KEY (c\_id) REFERENCES cs(c\_id) ON DELETE CASCADE,

CT\_id number(10) ,

T\_id number(10) not null

)

desc ct;



**4.PAYS TABLE:**

create table pays

(

ReceiptNo Number(10) primary key,

Tution\_fees number(20) not null,

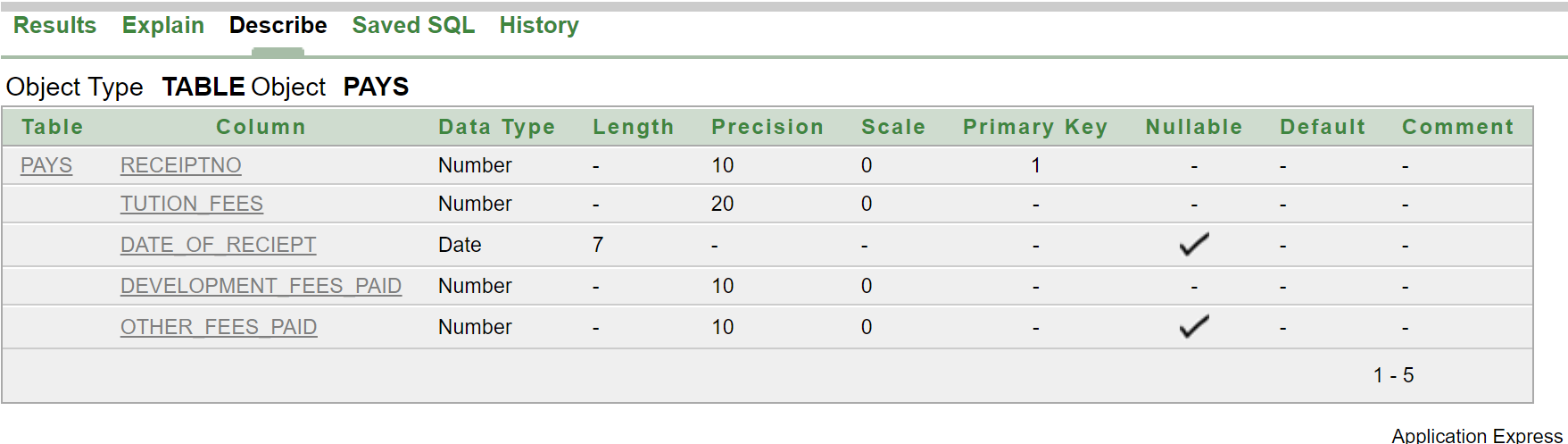
Date\_of\_reciept date,

Development\_fees\_paid number(10)not null,

Other\_fees\_paid number(10)

)

desc pays;



**5.DR TABLE:**

create table dr

(

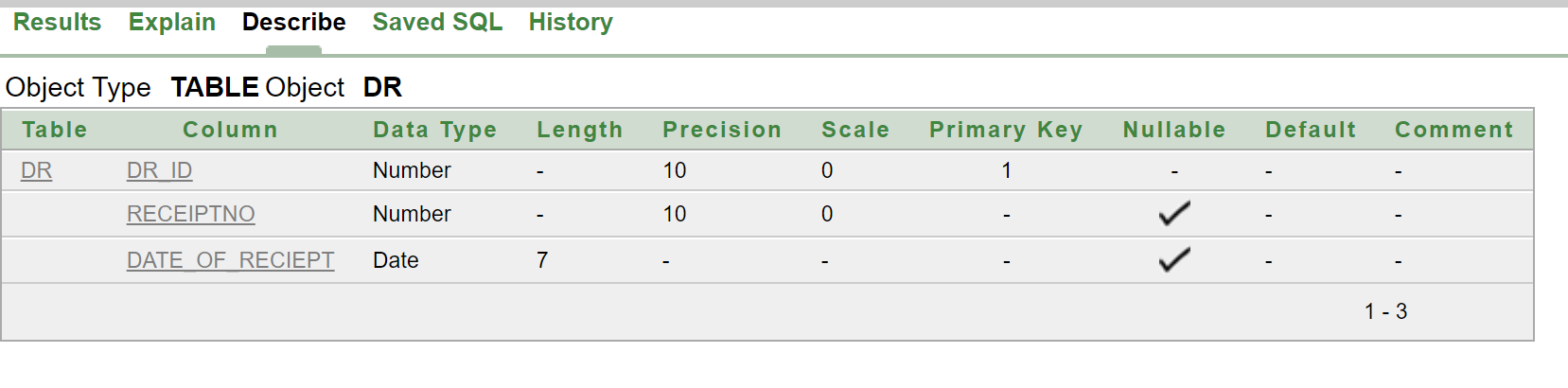
Dr\_id number(10) primary key,

ReceiptNo number(10) constraint pays\_ReceiptNo\_fk references pays (ReceiptNo),

Date\_of\_reciept date

)

desc dr;



**6.TEACHER TABLE:**

create table teacher

(

T\_id number(10) primary key,

T\_name varchar(10),

Phone number(15) unique,

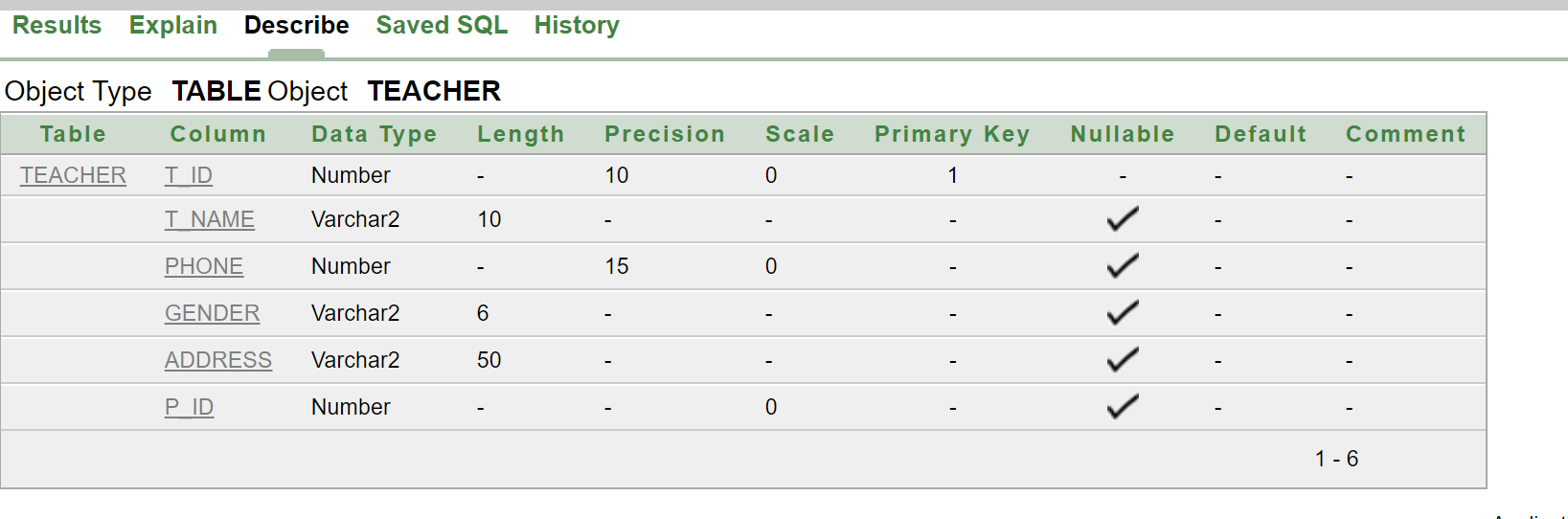
Gender varchar(6),

Address varchar2(50),

P\_id int

)

desc teacher;



**7.SU TABLE:**

create table Su

(

Su\_id number(10) primary key,

Su\_name varchar(12),

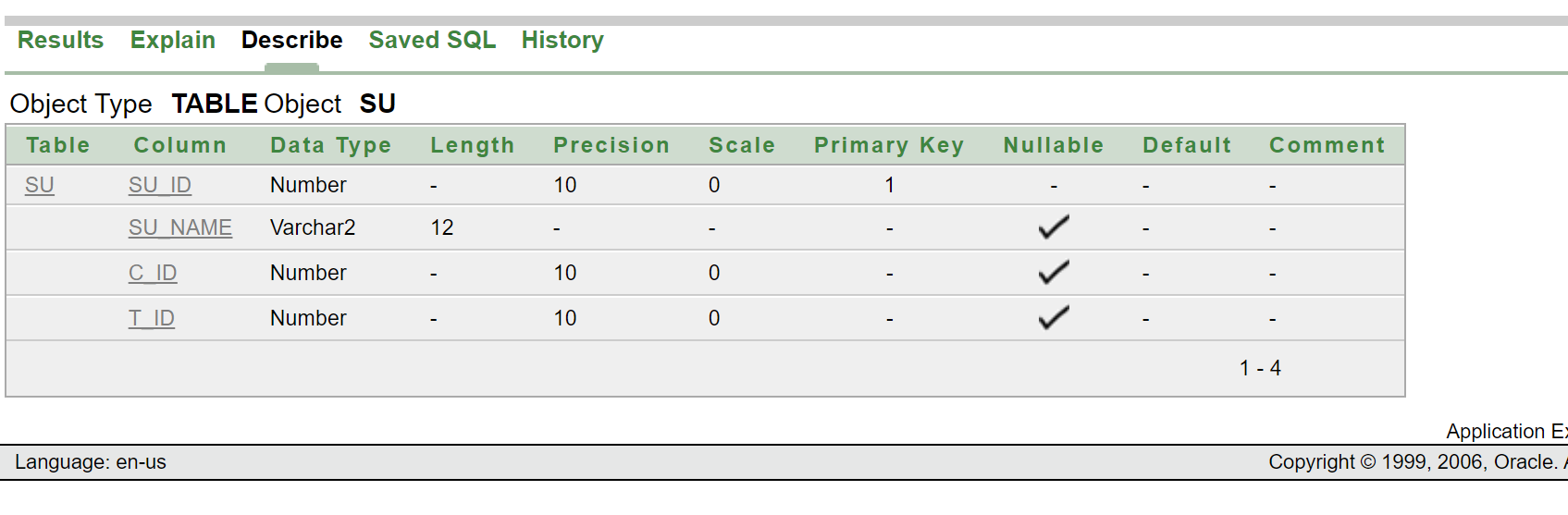
C\_id number(10),

FOREIGN KEY (c\_id) REFERENCES cs(c\_id) ON DELETE CASCADE,

T\_id number (10) constraint teacher\_T\_id\_fk references teacher(T\_id)

)

desc Su;



**8.SP TABLE:**

create table SP

(

Su\_id number(10) primary key,

FOREIGN KEY (Su\_id) REFERENCES Su(Su\_id) ON DELETE CASCADE,

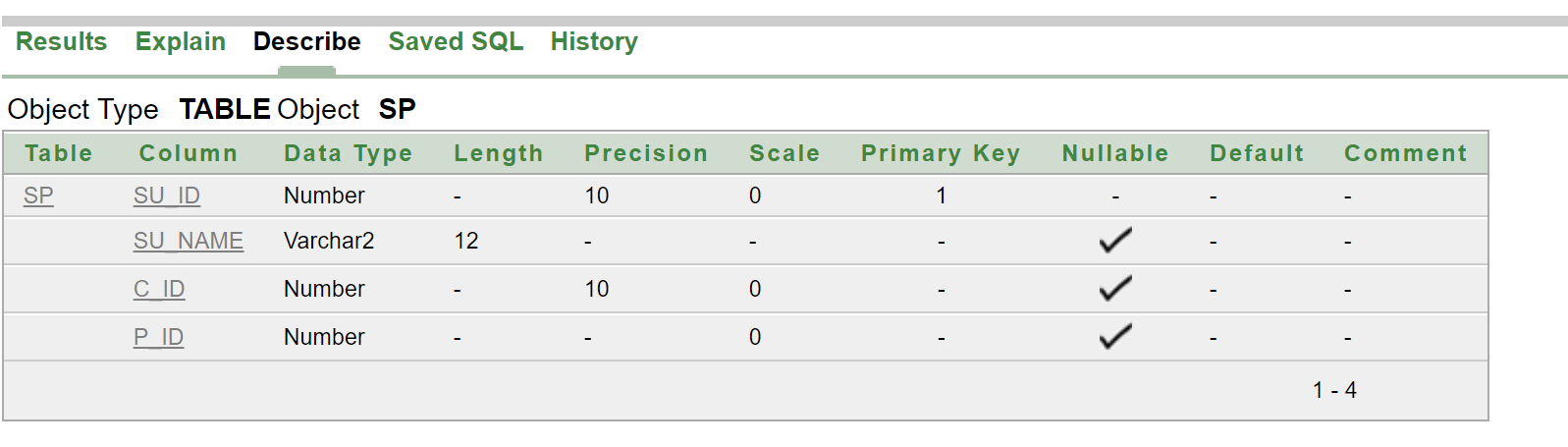
Su\_name varchar2(12),

C\_id number(10),

P\_id int

)

desc Sp;



**9.PRINCIPAL TABLE:**

create table Principal

(

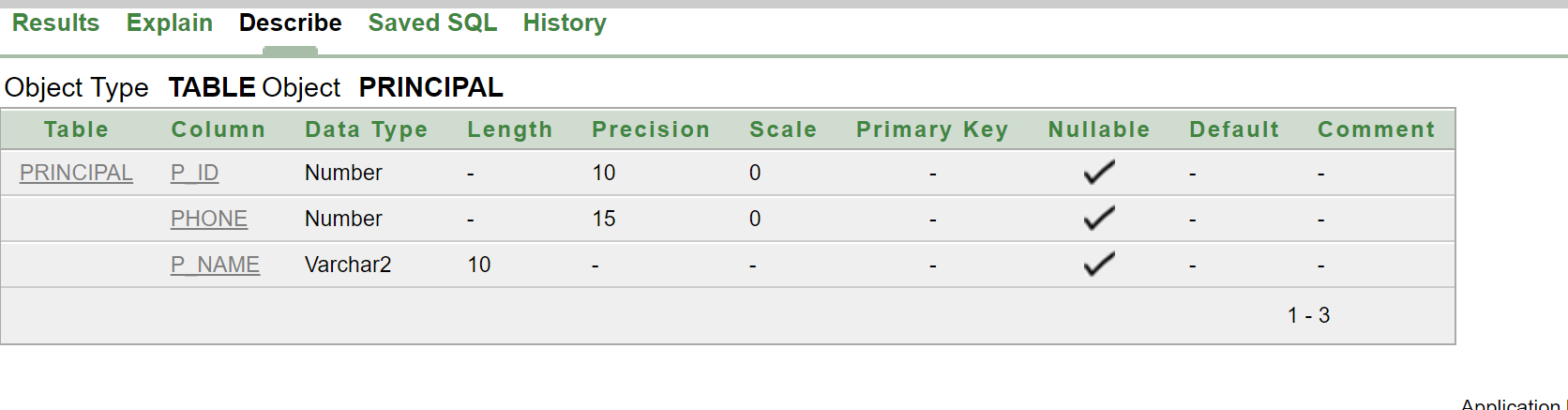
P\_id number(10),

Phone number (15),

P\_name varchar2(10)

)

desc Principal;



**10.STUDENT TABLE:**

create table student

(

S\_id number(10) unqiue,

S\_name varchar2(15),

Phone number (15),

Gender varchar2(6),

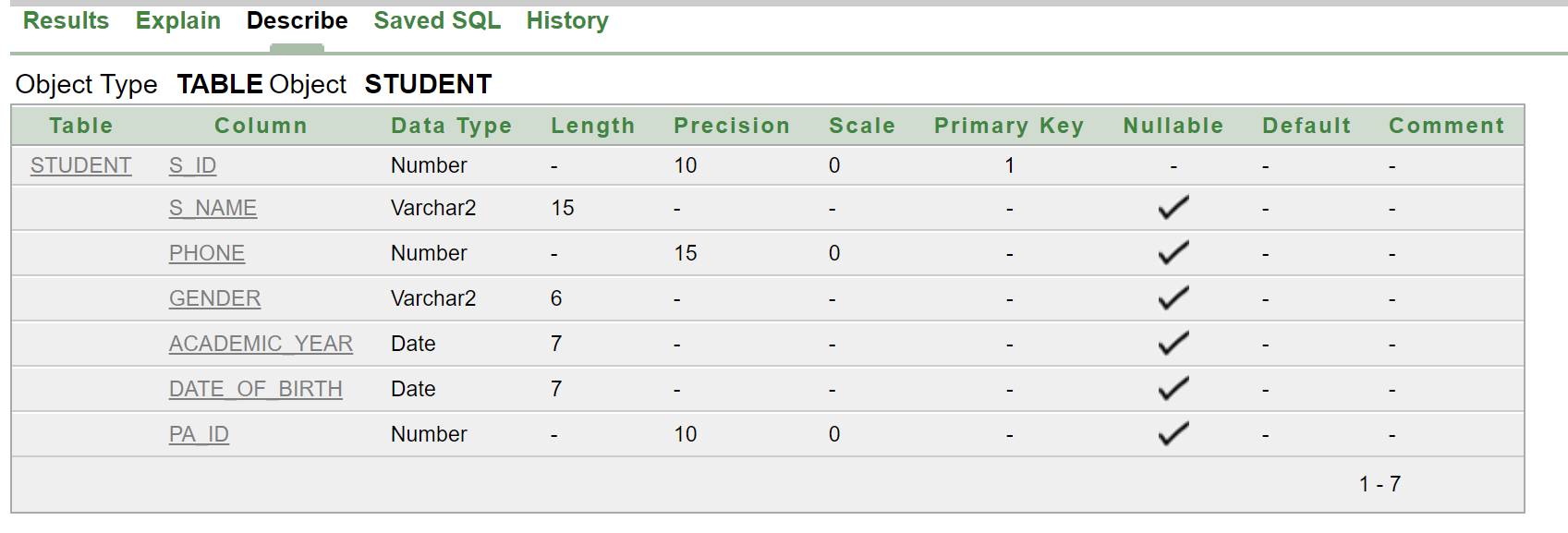
Academic\_Year date,

Date\_of\_birth date,

Pa\_id number(10)

)

desc student;



**11.PARENTS TABLE:**

create table parents

(

Pa\_id number(10) primary key,

Pa\_name varchar2(15),

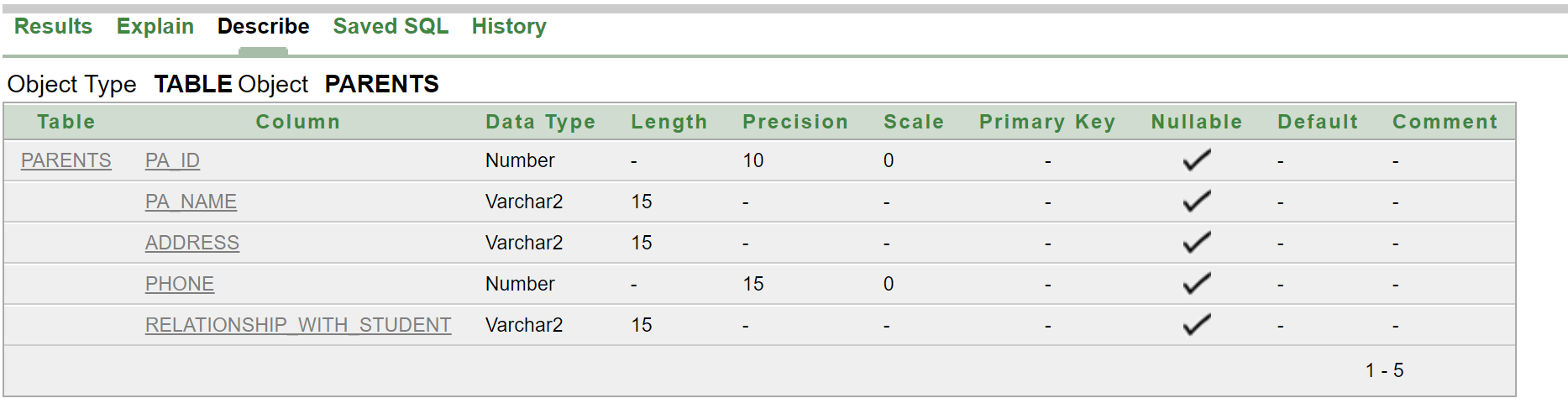
Address varcher2(15),

Phone varchar2(15),

Relationship\_with\_student varchar2(15)

)

desc parents;



DATA INSERTATION

**Class**

INSERT INTO class(C\_id,C\_name,Section)

VALUES(2001,'ASIF HASAN','A')

INSERT INTO class(C\_id,C\_name,Section)

VALUES(2002,'BADHON Haq','A')

INSERT INTO class(C\_id,C\_name,Section)

VALUES(2003,'SADMAN Ali','A')

INSERT INTO class(C\_id,C\_name,Section)

VALUES(2004,'MAHMUDUL','A')

INSERT INTO class(C\_id,C\_name,Section)

VALUES(2005,'IMTIAZ','C')

INSERT INTO class(C\_id,C\_name,Section)

VALUES(2006,'Anik Islam','B')

INSERT INTO class(C\_id,C\_name,Section)

VALUES(2007,'Jafor Ali','B')

INSERT INTO class(C\_id,C\_name,Section)

VALUES(2008,'Himel Khan','B')

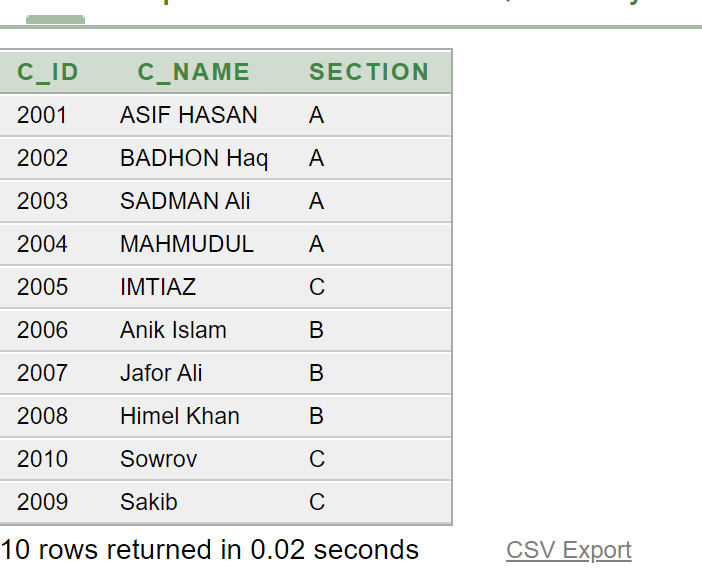
INSERT INTO class(C\_id,C\_name,Section)

VALUES(2009,'Sakib','C')

INSERT INTO class(C\_id,C\_name,Section)

VALUES(2010,'Sowrov','C')

select \* from class



**CS**

INSERT INTO cs(CS\_id,C\_id, S\_id)

VALUES(1001,2001,3001);

INSERT INTO cs(CS\_id,C\_id, S\_id)

VALUES(1002,2002,3002);

INSERT INTO cs(CS\_id,C\_id, S\_id)

VALUES(1003,2003,3003);

INSERT INTO cs(CS\_id,C\_id, S\_id)

VALUES(1004,2004,3004);

INSERT INTO cs(CS\_id,C\_id, S\_id)

VALUES(1005,2005,3005);

INSERT INTO cs(CS\_id,C\_id, S\_id)

VALUES(1006,2006,3006);

INSERT INTO cs(CS\_id,C\_id, S\_id)

VALUES(1007,2007,3007);

INSERT INTO cs(CS\_id,C\_id, S\_id)

VALUES(1008,2008,3008);

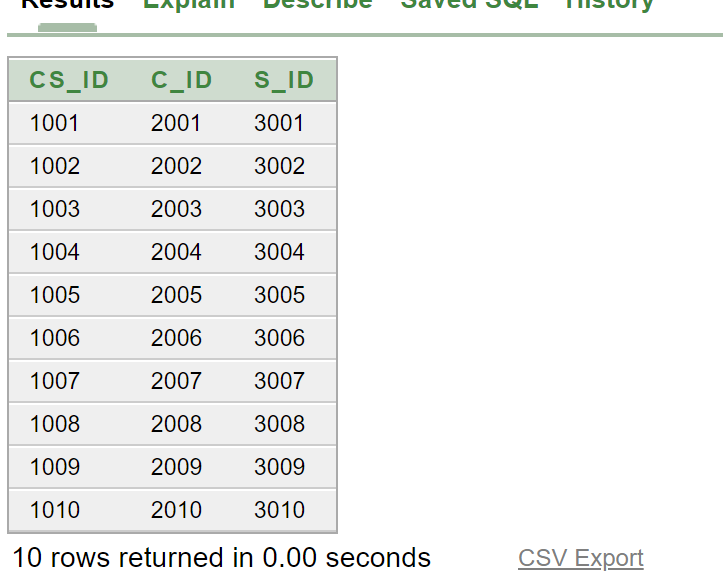
INSERT INTO cs(CS\_id,C\_id, S\_id)

VALUES(1009,2009,3009);

INSERT INTO cs(CS\_id,C\_id, S\_id)

VALUES(1010,2010,3010);

select \* from cs



**CT**

INSERT INTO ct(CT\_id,C\_id, T\_id)

VALUES(5001,2001,4301)

INSERT INTO ct(CT\_id,C\_id, T\_id)

VALUES(5002,2002,4302)

INSERT INTO ct(CT\_id,C\_id, T\_id)

VALUES(5003,2003,4303)

INSERT INTO ct(CT\_id,C\_id, T\_id)

VALUES(5004,2004,4304)

INSERT INTO ct(CT\_id,C\_id, T\_id)

VALUES(5005,2005,4305)

INSERT INTO ct(CT\_id,C\_id, T\_id)

VALUES(5006,2006,4306)

INSERT INTO ct(CT\_id,C\_id, T\_id)

VALUES(5007,2007,4307)

INSERT INTO ct(CT\_id,C\_id, T\_id)

VALUES(5008,2008,4308)

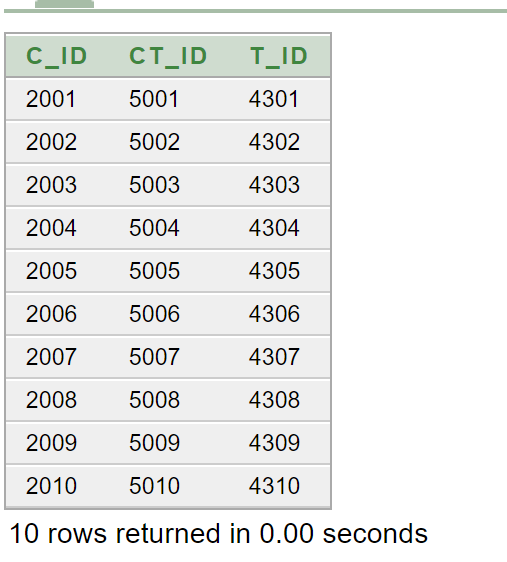
INSERT INTO ct(CT\_id,C\_id, T\_id)

VALUES(5009,2009,4309)

INSERT INTO ct(CT\_id,C\_id, T\_id)

VALUES(5010,2010,4310)

select \* from ct



**Pays**

INSERT INTO pays(ReceiptNo,Tution\_fees,Date\_of\_Reciept, development\_fees\_paid,Other\_fees\_paid)

VALUES(7631,1200,'26-August-2020',500,100);

INSERT INTO pays(ReceiptNo,Tution\_fees,Date\_of\_Reciept, development\_fees\_paid,Other\_fees\_paid)

VALUES(7632,1200,'21-August-2020',500,100);

INSERT INTO pays(ReceiptNo,Tution\_fees,Date\_of\_Reciept, development\_fees\_paid,Other\_fees\_paid)

VALUES(7633,1100,'27-August-2020',500,100);

INSERT INTO pays(ReceiptNo,Tution\_fees,Date\_of\_Reciept, development\_fees\_paid,Other\_fees\_paid)

VALUES(7634,1000,'21-August-2020',500,100);

INSERT INTO pays(ReceiptNo,Tution\_fees,Date\_of\_Reciept, development\_fees\_paid,Other\_fees\_paid)

VALUES(7635,1100,'29-August-2020',500,100);

INSERT INTO pays(ReceiptNo,Tution\_fees,Date\_of\_Reciept, development\_fees\_paid,Other\_fees\_paid)

VALUES(7636,1000,'20-August-2020',500,100);

INSERT INTO pays(ReceiptNo,Tution\_fees,Date\_of\_Reciept, development\_fees\_paid,Other\_fees\_paid)

VALUES(7637,1200,'12-August-2020',500,100);

INSERT INTO pays(ReceiptNo,Tution\_fees,Date\_of\_Reciept, development\_fees\_paid,Other\_fees\_paid)

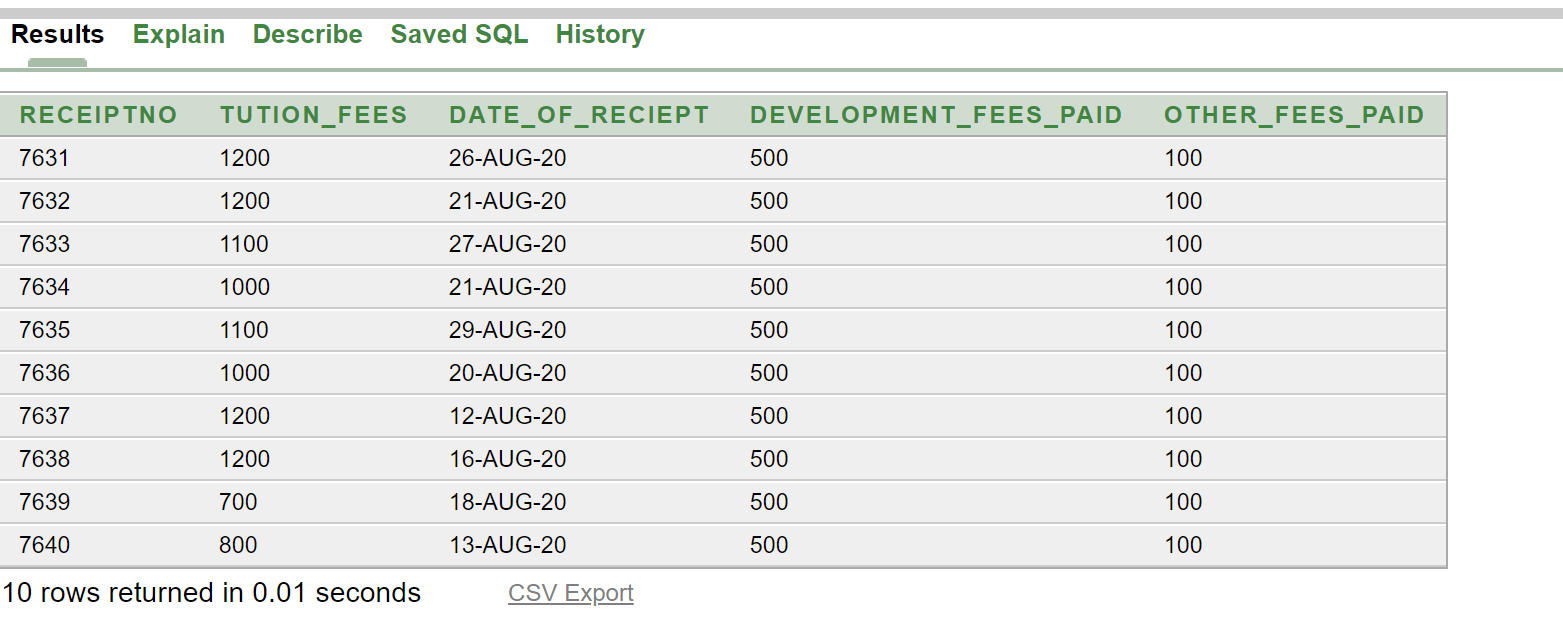
VALUES(7638,1200,'16-August-2020',500,100);

INSERT INTO pays(ReceiptNo,Tution\_fees,Date\_of\_Reciept, development\_fees\_paid,Other\_fees\_paid)

VALUES(7639,700,'18-August-2020',500,100);

INSERT INTO pays(ReceiptNo,Tution\_fees,Date\_of\_Reciept, development\_fees\_paid,Other\_fees\_paid)

VALUES(7640,800,'13-August-2020',500,100);

Select \* from pays

**Dr**

INSERT INTO dr(DR\_id,ReceiptNo, Date\_of\_Reciept)

VALUES(6681,7631,'26-August-2020');

INSERT INTO dr(DR\_id,ReceiptNo, Date\_of\_Reciept)

VALUES(6682,7632,'21-August-2020');

INSERT INTO dr(DR\_id,ReceiptNo, Date\_of\_Reciept)

VALUES(6683,7633,'27-August-2020');

INSERT INTO dr(DR\_id,ReceiptNo, Date\_of\_Reciept)

VALUES(6684,7634,'21-August-2020');

INSERT INTO dr(DR\_id,ReceiptNo, Date\_of\_Reciept)

VALUES(6685,7635,'29-August-2020');

INSERT INTO dr(DR\_id,ReceiptNo, Date\_of\_Reciept)

VALUES(6686,7636,'20-August-2020');

INSERT INTO dr(DR\_id,ReceiptNo, Date\_of\_Reciept)

VALUES(6687,7637,'12-August-2020');

INSERT INTO dr(DR\_id,ReceiptNo, Date\_of\_Reciept)

VALUES(6688,7638,'16-August-2020');

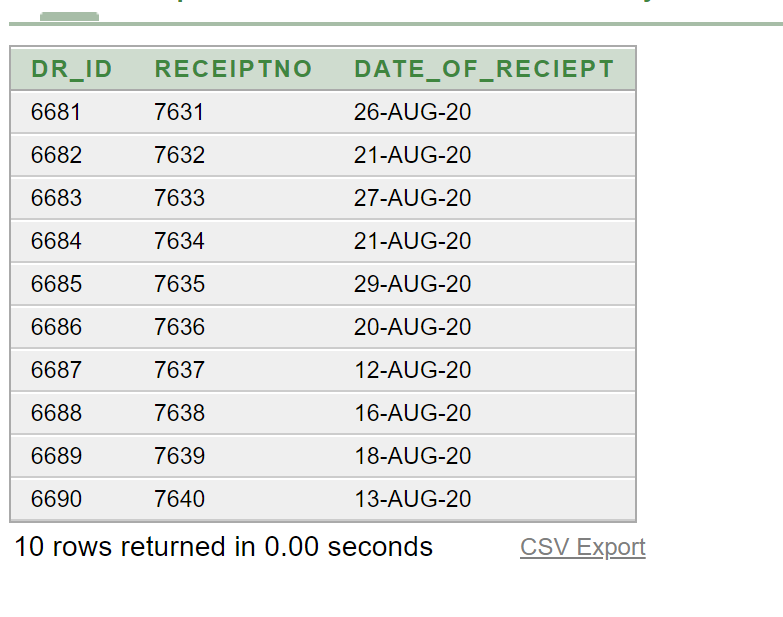
INSERT INTO dr(DR\_id,ReceiptNo, Date\_of\_Reciept)

VALUES(6689,7639,'18-August-2020');

INSERT INTO dr(DR\_id,ReceiptNo, Date\_of\_Reciept)

VALUES(6690,7640,'13-August-2020');

Select \* from dr



**Teacher**

INSERT INTO teacher(T\_id,T\_name,phone,Gender,Address,P\_Id)

VALUES(4301,'SRABON ','01419855236','MALE', 'MIRPUR',105);

INSERT INTO teacher(T\_id,T\_name,phone,Gender,Address,P\_Id)

VALUES(4302,'JOUNAL ','01919855236','MALE', 'MIRPUR',102);

INSERT INTO teacher(T\_id,T\_name,phone,Gender,Address,P\_Id)

VALUES(4303,'KARIM ','01719555236','MALE', 'MIRPUR',150);

INSERT INTO teacher(T\_id,T\_name,phone,Gender,Address,P\_Id)

VALUES(4304,'RAHIM ','01819555236','MALE','UTTARA',140);

INSERT INTO teacher(T\_id,T\_name,phone,Gender,Address,P\_Id)

VALUES(4305,'HAMIM ','01559555236','MALE','COMILLA',153);

INSERT INTO teacher(T\_id,T\_name,phone,Gender,Address,P\_Id)

VALUES(4306,'KONA ','01711988236','FEMALE', 'SYLET',162);

INSERT INTO teacher(T\_id,T\_name,phone,Gender,Address,P\_Id)

VALUES(4307,'ASIM ','01919565236','MALE', 'KHULNA',202);

INSERT INTO teacher(T\_id,T\_name,phone,Gender,Address,P\_Id)

VALUES(4308,'REHANA ','017118555236','FEMALE', 'MIRPUR',165);

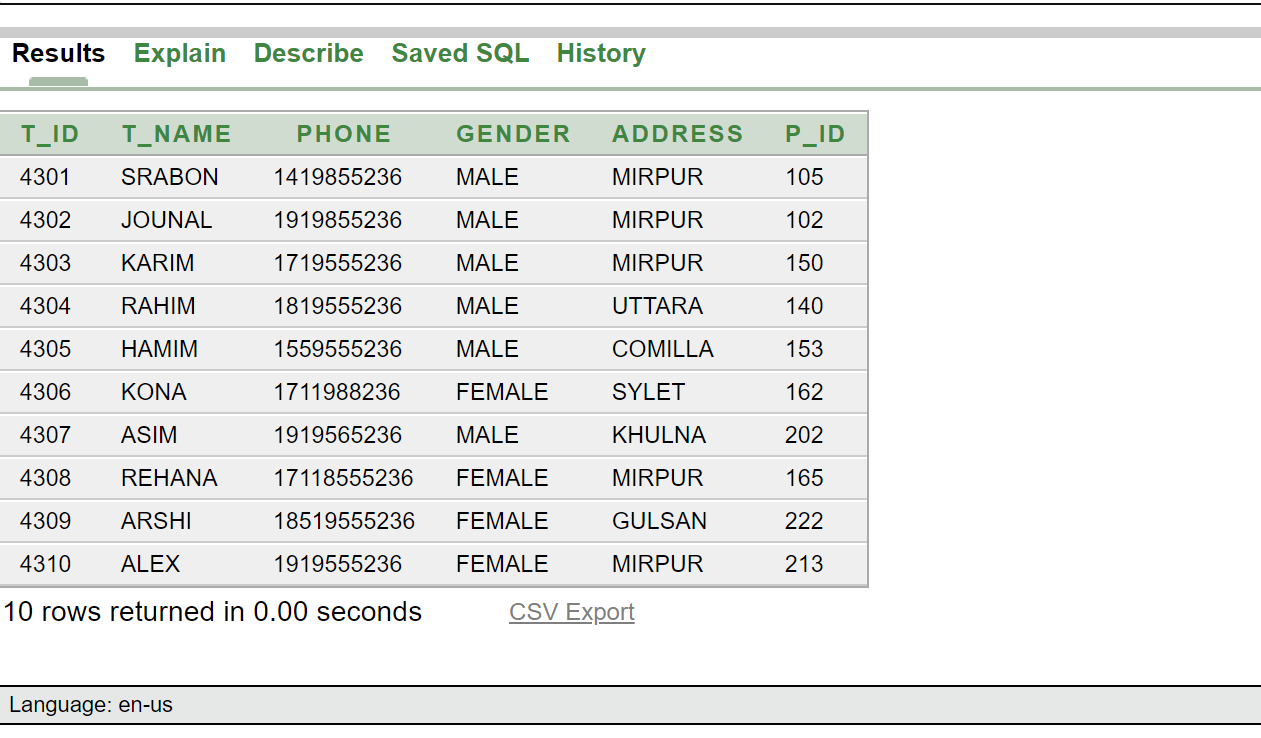
INSERT INTO teacher(T\_id,T\_name,phone,Gender,Address,P\_Id)

VALUES(4309,'ARSHI’,'018519555236','FEMALE', 'GULSAN',222);

INSERT INTO teacher(T\_id,T\_name,phone,Gender,Address,P\_Id)

VALUES(4310,'ALEX','01919555236','FEMALE', 'MIRPUR',213);

Select \* from teacher



**Su**

INSERT INTO Su(Su\_ID,Su\_Name, C\_ID, T\_id)   
VALUES(50001,'Sculpture',2001,4301);

INSERT INTO Su(Su\_ID,Su\_Name, C\_ID, T\_id)   
VALUES(50002,'Printmaking',2002,4302);

INSERT INTO Su(Su\_ID,Su\_Name, C\_ID, T\_id)   
VALUES(50003,'Art design',2003,4303);

INSERT INTO Su(Su\_ID,Su\_Name, C\_ID, T\_id)   
VALUES(50004,'Drawing',2004,4304);

INSERT INTO Su(Su\_ID,Su\_Name, C\_ID, T\_id)   
VALUES(50005,'Studio arts',2005,4305);

INSERT INTO Su(Su\_ID,Su\_Name, C\_ID, T\_id)   
VALUES(50006,'Architecture',2006,4306);

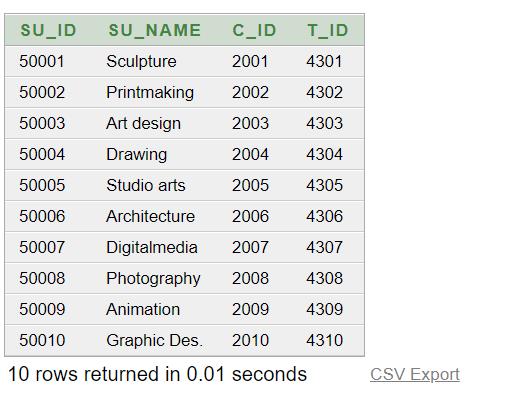
INSERT INTO Su(Su\_ID,Su\_Name, C\_ID, T\_id)   
VALUES(50007,'Digitalmedia',2007,4307);

INSERT INTO Su(Su\_ID,Su\_Name, C\_ID, T\_id)   
VALUES(50008,'Photography',2008,4308);

INSERT INTO Su(Su\_ID,Su\_Name, C\_ID, T\_id)   
VALUES(50009,'Animation',2009,4309);

INSERT INTO Su(Su\_ID,Su\_Name, C\_ID, T\_id)   
VALUES(50010,'Graphic Des.',2010,4310);

select \* from Su



**Sp**

INSERT INTO SP(Su\_ID,Su\_Name, C\_ID, P\_Id)

VALUES(50001,'Sculpture',2001,105);

INSERT INTO SP(Su\_ID,Su\_Name, C\_ID, P\_Id)

VALUES(50002,'Printmaking',2002,105);

INSERT INTO SP(Su\_ID,Su\_Name, C\_ID, P\_Id)

VALUES(50003,'Art design',2003,105);

INSERT INTO SP(Su\_ID,Su\_Name, C\_ID, P\_Id)

VALUES(50004,'Drawing ',2004,105);

INSERT INTO SP(Su\_ID,Su\_Name, C\_ID, P\_Id)

VALUES(50005,'Studio arts',2005,105);

INSERT INTO SP(Su\_ID,Su\_Name, C\_ID, P\_Id)

VALUES(50006,'Architecture',2006,105);

INSERT INTO SP(Su\_ID,Su\_Name, C\_ID, P\_Id)

VALUES(50007,'Digitalmedia',2007,105);

INSERT INTO SP(Su\_ID,Su\_Name, C\_ID, P\_Id)

VALUES(50008,'Photography',2008,105);

INSERT INTO SP(Su\_ID,Su\_Name, C\_ID, P\_Id)

VALUES(50009,'Animation',2009,105);

INSERT INTO SP(Su\_ID,Su\_Name, C\_ID, P\_Id)

VALUES(50010,'Graphic Des.',2010,105);

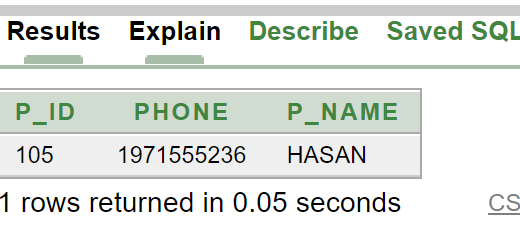
select \* from Sp

**Principal**

INSERT INTO Principal(P\_Id,Phone,P\_Name)

VALUES(105,'01971555236','HASAN ');

Select \* from principal



**Student**

INSERT INTO student(S\_id,S\_name,phone,Gender, Academic\_Year,date\_of birth,Branch, Pa ID)

VALUES(3001,'JAVED ALI','01511639433','MALE','13-August-2018','3-August-2002','MIRPUR',10001);

INSERT INTO student(S\_id,S\_name,phone,Gender, Academic\_Year,date\_of birth,Branch, Pa ID)

VALUES(3002,'ROJA KHAN','01811639433','FEMALE','13-August-2018','3-JANUARY-2002','MIRPUR',10002);

INSERT INTO student(S\_id,S\_name,phone,Gender, Academic\_Year,date\_of birth,Branch, Pa ID)

VALUES(3003,'SAFAEAT KHAN','01911639433','MALE','13-August-2016','26-JANUARY-2002','MIRPUR',10003);

INSERT INTO student(S\_id,S\_name,phone,Gender, Academic\_Year,date\_of birth,Branch, Pa ID)

VALUES(3004,'ABRAR AHMED'','01955639433','MALE','13-August-2016','2-JANUARY-2002','MIRPUR',10004);

INSERT INTO student(S\_id,S\_name,phone,Gender, Academic\_Year,date\_of\_birth, Pa\_ID)

VALUES(3005,'ANNAYA KHAN','01711639433','FEMALE','13-August-2016','26-SEPTEMBER-2002','GULSAN',10005);

INSERT INTO student(S\_id,S\_name,phone,Gender, Academic\_Year,date\_of\_birth, Pa\_ID)

VALUES(3006,'ANNAYA AKTER','01798639433','FEMALE','13-August-2018','26-OCTOBER-2002','GULSAN',10006);

INSERT INTO student(S\_id,S\_name,phone,Gender, Academic\_Year,date\_of\_birth, Pa\_ID)

VALUES(3007,'ABIR HOSSEN','0159639455','MALE',13-August-2018','20-OCTOBER-2004','MIRPUR',10007);

INSERT INTO student(S\_id,S\_name,phone,Gender, Academic\_Year,date\_of\_birth, Pa\_ID)

VALUES(3008,'ASIF HOSSEN','0159539455','MALE',13-August-2018','2-OCTOBER-2002','MIRPUR',10008);

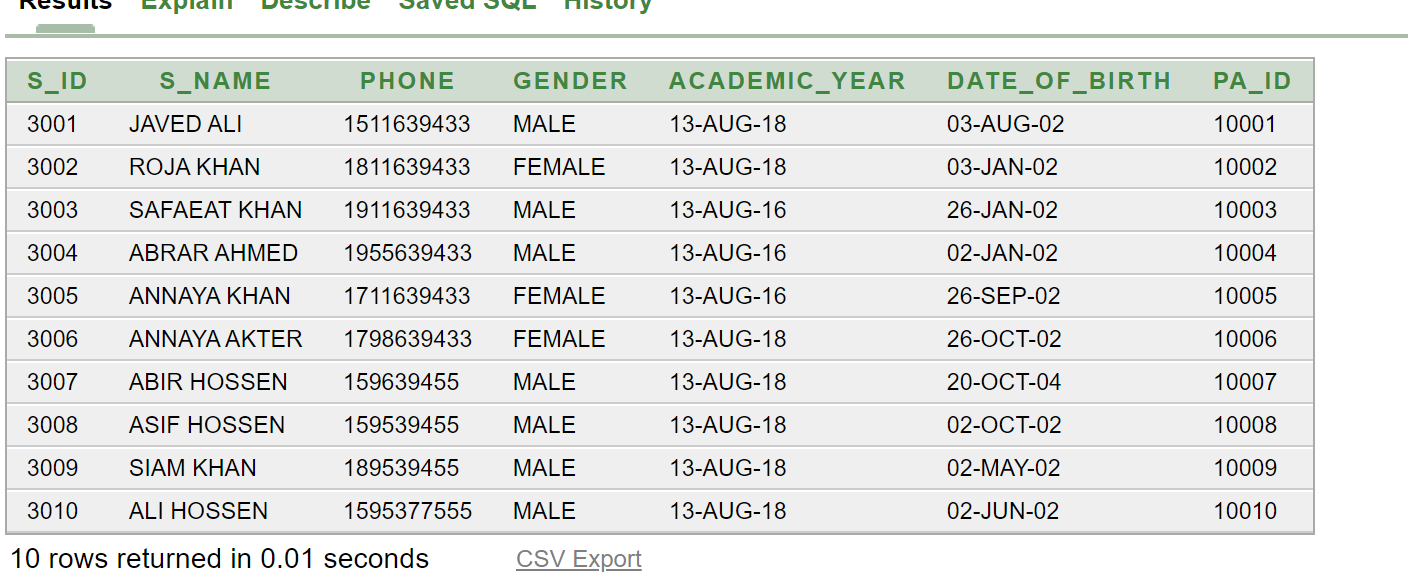
INSERT INTO student(S\_id,S\_name,phone,Gender, Academic\_Year,date\_of\_birth,Pa\_ID)

VALUES(3009,'SIAM KHAN','0189539455','MALE',13-August-2018','2-MAY-2002','MIRPUR',10009);

INSERT INTO student(S\_id,S\_name,phone,Gender, Academic\_Year,date\_of\_birth, , Pa\_ID)

VALUES(3010,'ALI HOSSEN','01595377555','MALE',13-August-2018','2-JUNE-2002','MIRPUR',10010);

Select \* from student



**Parents**

INSERT INTO parents(Pa ID,pa\_Name,Address,phone,Relationship\_with\_student )

VALUES(80001,'AFZAL HOSSEN','MIRPUR','01813048025','FATHER');

INSERT INTO parents(Pa ID,pa\_Name,Address,phone,Relationship\_with\_student )

VALUES(80002,'ABUL HOSSEN','MIRPUR','01913048025','FATHER');

INSERT INTO parents(Pa ID,pa\_Name,Address,phone,Relationship\_with\_student )

VALUES(80003,'KONIKA HOSSEN','MIRPUR','01814048025','MOTHER');

INSERT INTO parents(Pa ID,pa\_Name,Address,phone,Relationship\_with\_student )

VALUES(80004,'ALIF HOSSEN','GULSAN','01713048025','FATHER');

INSERT INTO parents(Pa ID,pa\_Name,Address,phone,Relationship\_with\_student )

VALUES(80005,'RABEYA HOSSEN','MIRPUR','01813058025','MOTHER');

INSERT INTO parents(Pa ID,pa\_Name,Address,phone,Relationship\_with\_student )

VALUES(80006,'AKRAM HOSSEN','MIRPUR','01813048022','FATHER');

INSERT INTO parents(Pa ID,pa\_Name,Address,phone,Relationship\_with\_student )

VALUES(80007,'AFZAL KHAN','GULSAN','01813058025','FATHER');

INSERT INTO parents(Pa ID,pa\_Name,Address,phone,Relationship\_with\_student )

VALUES(80008,'REKSONA BEGUM','MIRPUR','01813048027','MOTHER');

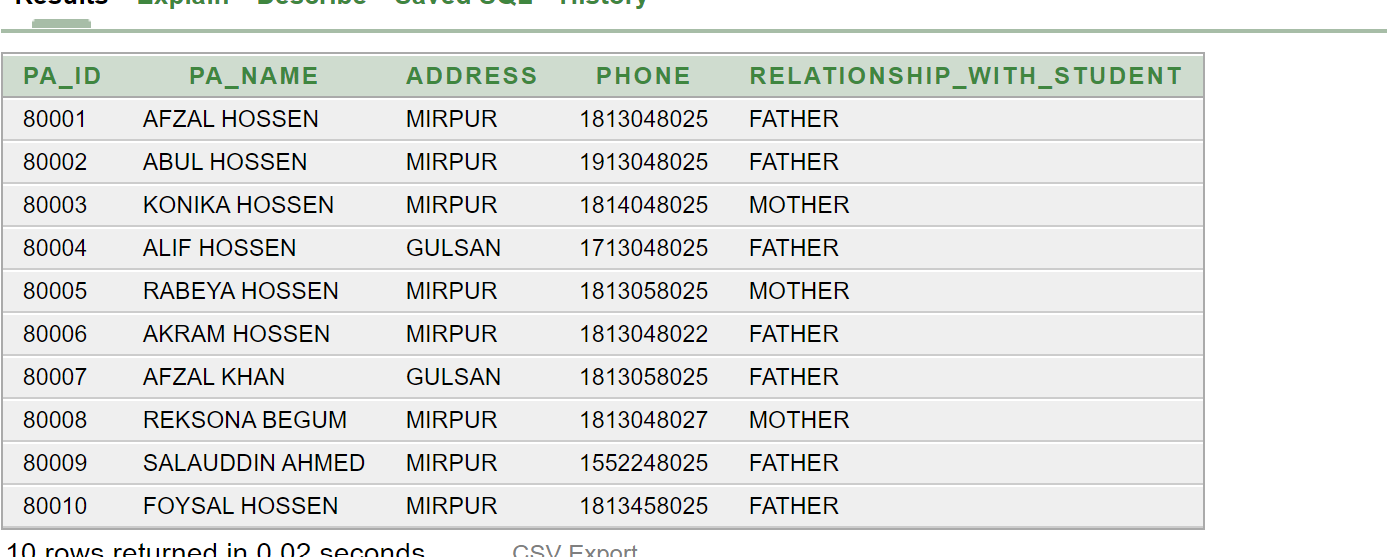
INSERT INTO parents(Pa ID,pa\_Name,Address,phone,Relationship\_with\_student )

VALUES(80009,'SALAUDDIN AHMED','MIRPUR','01552248025','FATHER');

INSERT INTO parents(Pa ID,pa\_Name,Address,phone,Relationship\_with\_student )

VALUES(80010,'FOYSAL HOSSEN','MIRPUR','01813458025','FATHER');

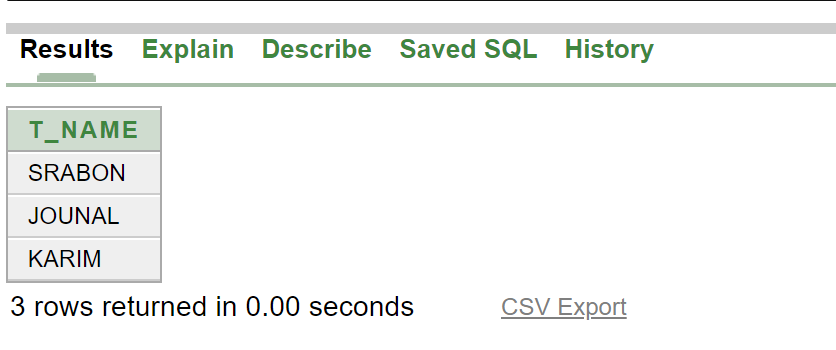
Select \* from parents



**10 Query:**

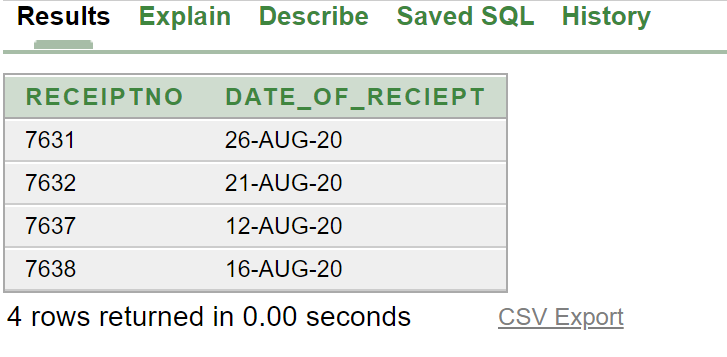
**Single Row Sub query**

Select t\_name from teacher where address=(select address from teacher where t\_id=4301) and gender =(Select gender from teacher where t\_id=4304)

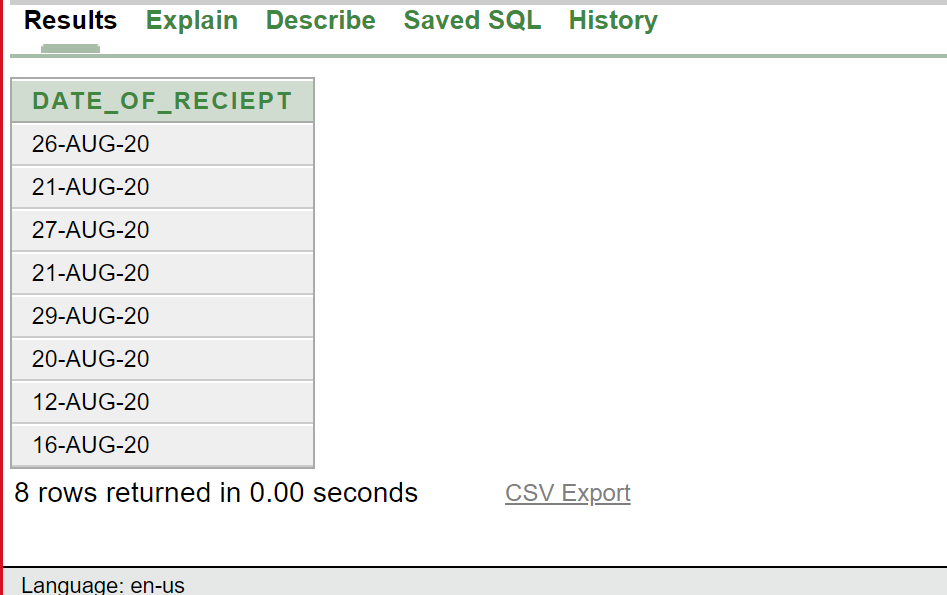


**Sub query**

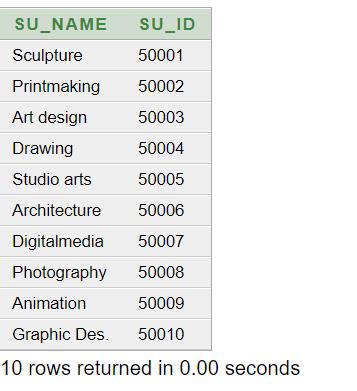
1. select receiptno,date\_of\_reciept from pays where tution\_fees=(select max (tution\_fees)from pays)



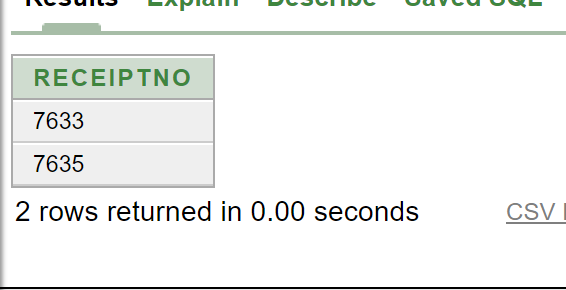
1. select date\_of\_reciept from pays where tution\_fees>(select tution\_fees from pays where receiptno=7640)



1. select Su\_name,su\_id from su where T\_id in(select T\_id from teacher)

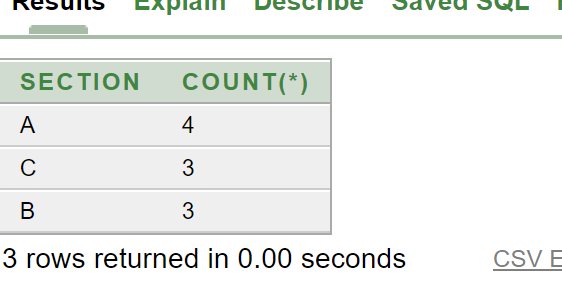


1. select receiptNo from pays where tution\_fees in (select max(tution\_fees)from pays where tution\_fees <>(select max(tution\_fees)from pays))

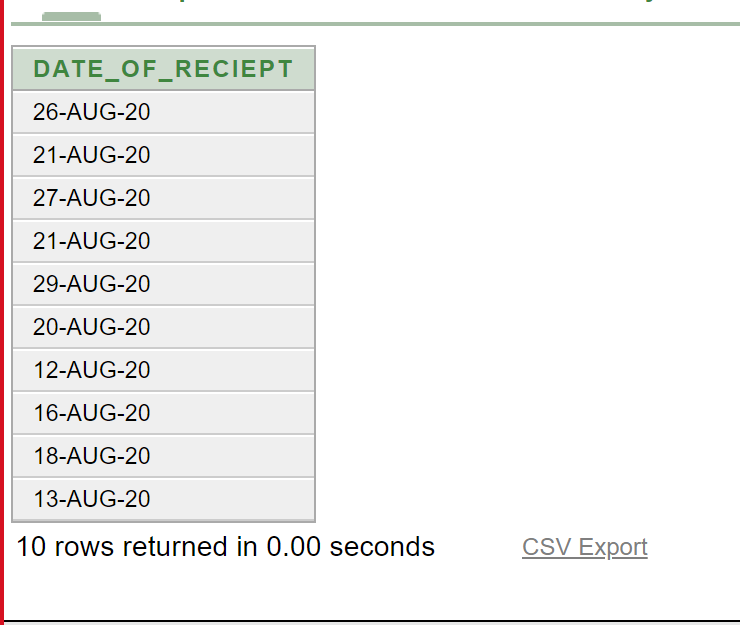


**Group function**

1.select section,count(\*) from class group by section

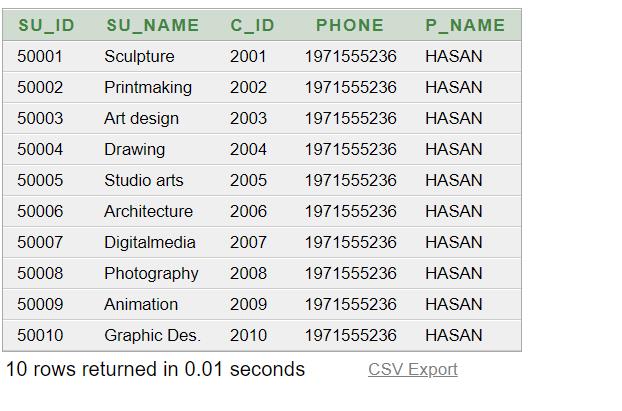


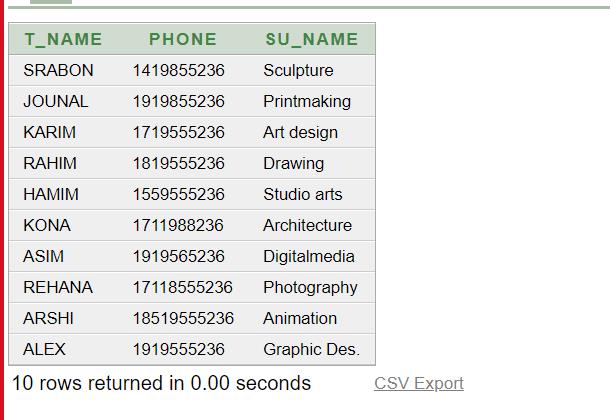
2. select date\_of\_reciept from pays where tution\_fees in(select max(tution\_fees)from pays group by receiptno)



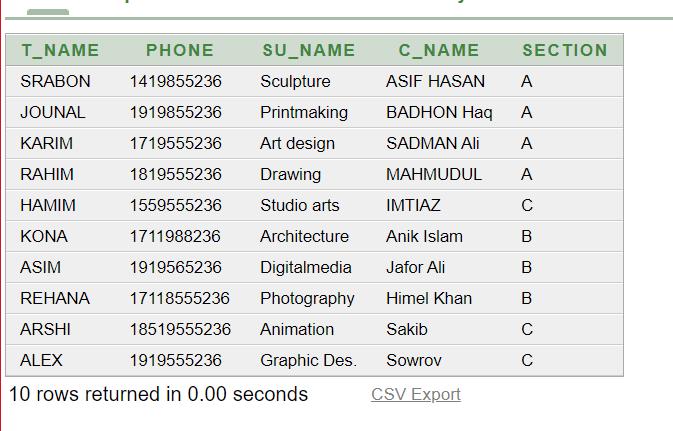
**Joining**

1. select su.Su\_id, Su.Su\_name,su.c\_id,p.phone,p.p\_name from SP su, principal p where su.P\_Id = p.P\_Id

2. Select T.T\_name,T.phone,s.Su\_name from Teacher T, Su s where T.T\_id=S.T\_id



3. Select T.T\_name,T.phone,s.Su\_name,C.C\_name,C.Section from Teacher T, Su s,Class C where T.T\_id=S.T\_id and C.C\_id=S.C\_id



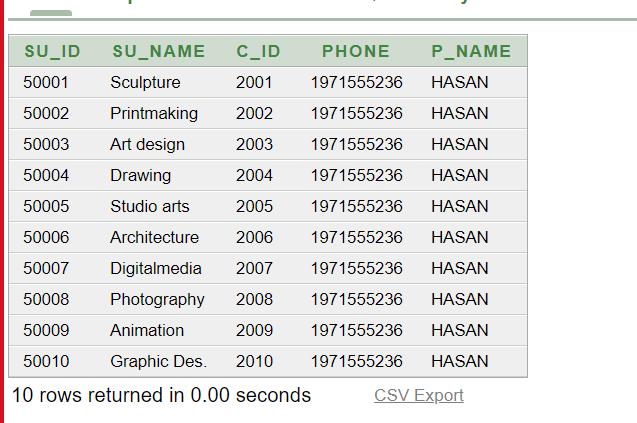
**View**

create or replace view SPP

as

select su.Su\_id, Su.Su\_name,su.c\_id,p.phone,p.p\_name from SP su, principal p where su.P\_Id = p.P\_Id

Select \* from SPP



**THE END**