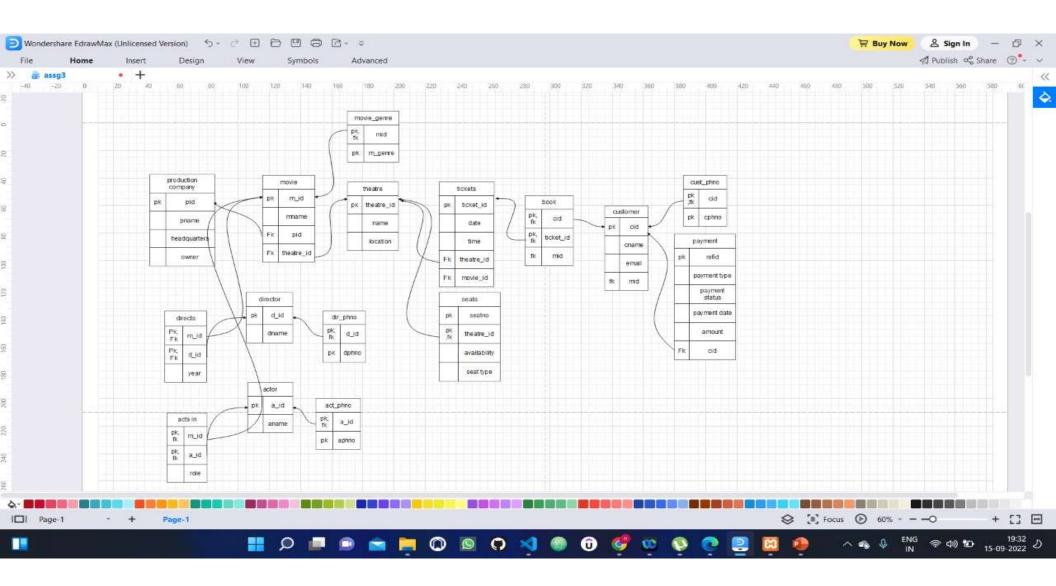
DBMS ASSIGNMENT - 03 NAME - DIVYANG JAIN ROLL NO. - B200826CS

RELATIONAL DIAGRAM



1. CREATE DATABASE

```
1 CREATE DATABASE assg3_b200826cs;
```

2. USE COMMAND

```
Run SQL query/queries on database assg3_b200826cs: 

1 USE assg3_b200826cs;
```

3. CREATE TABLE:-

a) PRODUCTION COMPANY

b) THEATRE

```
Run SQL query/queries on database assg3_b200826cs: 

CREATE TABLE theatre(
t_id CHAR(5) NOT NULL UNIQUE,
t_name VARCHAR(40) NOT NULL,
locations VARCHAR(40) NOT NULL,
PRIMARY KEY(t_id)

);
```

c) MOVIE

```
CREATE TABLE movie(

m_id CHAR(5) NOT NULL UNIQUE,

m_name VARCHAR(40) NOT NULL,

pr_id CHAR(5) NOT NULL,

th_id CHAR(5) NOT NULL,

PRIMARY KEY(m_id),

FOREIGN KEY(pr_id) REFERENCES production_company(p_id),

FOREIGN KEY(th_id) REFERENCES theatre(t_id)

);
```

d) TICKET

```
1 CREATE TABLE tickets(
2 ticket_id INT(10) NOT NULL UNIQUE,
3 movie_date DATE NOT NULL,
4 movie_time TIME NOT NULL,
5 th_id CHAR(5) NOT NULL,
6 movie_id CHAR(5) NOT NULL,
7 PRIMARY KEY(ticket_id),
8 FOREIGN KEY(th_id) REFERENCES theatre(t_id),
9 FOREIGN KEY(movie_id) REFERENCES movie(m_id)
10 );
```

e) SEATS

```
1 CREATE TABLE seats(
2    seat_no INT(5) NOT NULL UNIQUE,
3    th_id CHAR(5) NOT NULL,
4    availabilityy VARCHAR(20) NOT NULL,
5    seat_type CHAR(1) NOT NULL,
6    CONSTRAINT PRIMARY KEY(seat_no, th_id),
7    FOREIGN KEY(th_id) REFERENCES theatre(t_id)
8 );
```

f) ACTORS

```
1 CREATE TABLE actors(
2 a_id CHAR(5) NOT NULL UNIQUE,
3 a_name VARCHAR(40) NOT NULL,
4 PRIMARY KEY(a_id)
5 );
6
```

g) DIRECTORS

```
1 CREATE TABLE directors(
2 d_id CHAR(5) NOT NULL UNIQUE,
3 d_name VARCHAR(40) NOT NULL,
4 PRIMARY KEY(d_id)
5 );
```

h) CUSTOMER

```
CREATE TABLE customer(

c_id CHAR(5) NOT NULL UNIQUE,

c_name VARCHAR(40) NOT NULL,

email VARCHAR(25),

tkt_id INT(10) NOT NULL UNIQUE,

FOREIGN KEY(tkt_id) REFERENCES tickets(ticket_id),

PRIMARY KEY(c_id)

);
```

i) PAYMENT

```
1 CREATE TABLE payment(
2    ref_id CHAR(5) NOT NULL UNIQUE,
3    payment_type VARCHAR(40) NOT NULL,
4    payment_status VARCHAR(25) NOT NULL,
5    payment_date DATE NOT NULL,
6    amount FLOAT NOT NULL,
7    cm_id CHAR(5) NOT NULL,
8    PRIMARY KEY(ref_id),
9    FOREIGN KEY(cm_id) REFERENCES customer(c_id)
10 );
```

j) GENRE

```
1 CREATE TABLE genre(
2    m_id CHAR(5) NOT NULL,
3    genre VARCHAR(10) NOT NULL UNIQUE,
4    CONSTRAINT PRIMARY KEY(m_id, genre),
5    FOREIGN KEY(m_id) REFERENCES movie(m_id)
6 );
7
```

k) ACTOR PHONE NUMBER

```
1 CREATE TABLE act_ph(
2    a_id CHAR(5) NOT NULL UNIQUE,
3    ph_no INT(10) NOT NULL,
4    CONSTRAINT PRIMARY KEY(a_id, ph_no),
5    FOREIGN KEY(a_id) REFERENCES actors(a_id)
6 );
```

L) DIRECTOR PHONE NUMBER

```
1 CREATE TABLE direct_ph(
2    d_id CHAR(5) NOT NULL UNIQUE,
3    ph_no INT(10) NOT NULL,
4    CONSTRAINT PRIMARY KEY(d_id, ph_no),
5    FOREIGN KEY(d_id) REFERENCES directors(d_id)
6 );
```

m) CUSTOMER PHONE NUMBER

n) CUSTOMER TICKET (M - N) RELATION

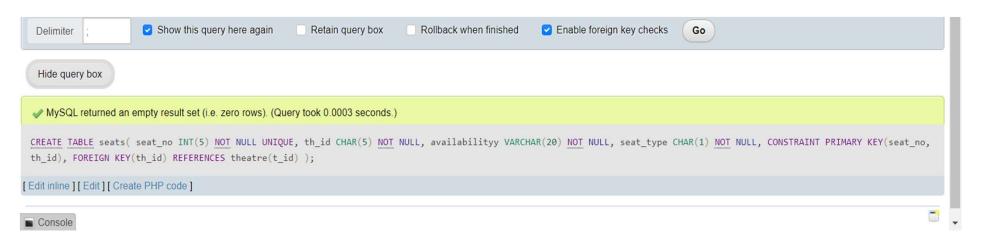
```
1 CREATE TABLE customer_ticket(
2    c_id CHAR(5) NOT NULL UNIQUE,
3    ticket_id INT(10) NOT NULL UNIQUE,
4    CONSTRAINT PRIMARY KEY (ticket_id, c_id),
5    FOREIGN KEY(c_id) REFERENCES customer(c_id),
6    FOREIGN KEY(ticket_id) REFERENCES tickets(ticket_id)
7
8 );
```

o) ACTS IN MOVIE

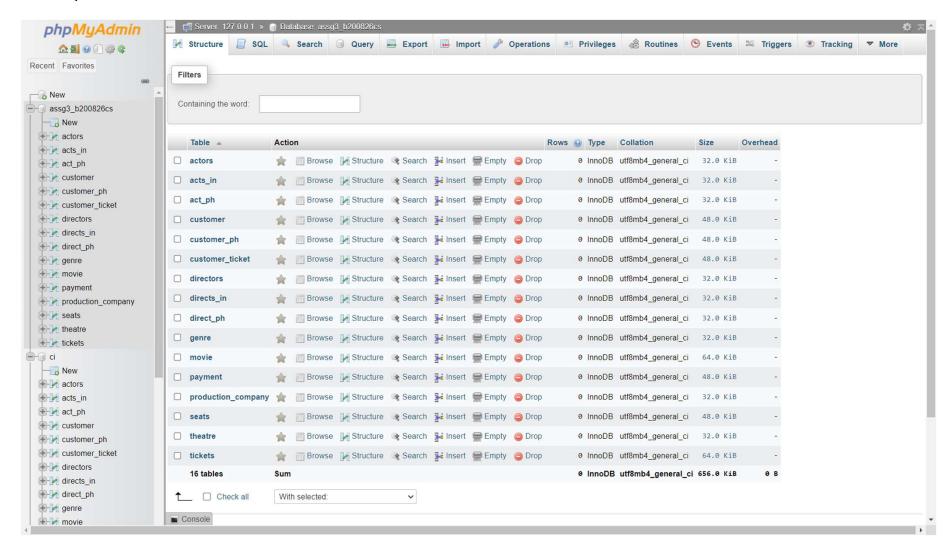
```
1 CREATE TABLE acts_in(
2    m_id CHAR(5) NOT NULL,
3    a_id CHAR(5) NOT NULL,
4    roll VARCHAR(30) NOT NULL,
5    CONSTRAINT PRIMARY KEY(m_id, a_id),
6    FOREIGN KEY(m_id) REFERENCES movie(m_id),
7    FOREIGN KEY(a_id) REFERENCES actors(a_id)
8 );
```

p) DIRECTS IN

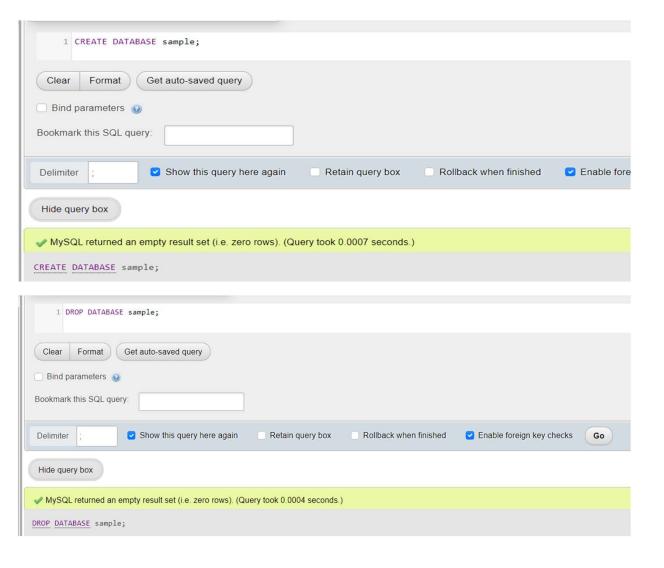
AFTER EACH TABLE CREATION, SUCCESS COMMAND APPEARS



ALL QUERIES ARE INSERTED



I have created a sample database and used Drop command on that. Inserting the picture of that function.



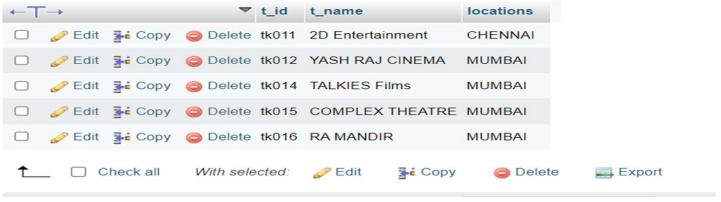
INSERTION IN PRODUCTION COMPANY

```
INSERT INTO production_company(p_id,p_name,headquarters,ownerof) VALUES ("qw124","YASH RAJ FILMS","MUMBAI","YASH CHOPRA");
INSERT INTO production_company(p_id,p_name,headquarters,ownerof) VALUES ("qw125","2D Entertainment","CHENNAI","SURIYA");
INSERT INTO production_company(p_id,p_name,headquarters,ownerof) VALUES ("qw126","Ajay Devgn Films","MUMBAI","AAY DEVGAN");
INSERT INTO production_company(p_id,p_name,headquarters,ownerof) VALUES ("qw127","Anurag Kashyap Films","MUMBAI","Anurag Kashyap");
INSERT INTO production_company(p_id,p_name,headquarters,ownerof) VALUES ("qw128","Bhansali Productions","MUMBAI","SANAY L. BHANSALI");
```

←T	→		~	p_id	p_name		headquarters	ownerof
	Edit	≩ Сору	Delete	qw124	YASH RAJ	FILMS	MUMBAI	YASH CHOPRA
	Edit	Copy	Delete	qw125	2D Entertai	nment	CHENNAI	SURIYA
	Edit	≩ Сору	Delete	qw126	Ajay Devgn	Films	MUMBAI	AAY DEVGAN
	Edit	≩ Copy	Delete	qw127	Anurag Kas	shyap Films	MUMBAI	Anurag Kashyap
	Edit	2 Сору	Delete	qw128	Bhansali Pr	oductions	MUMBAI	SANAY L. BHANSALI
↑ _	c	check all	With sele	cted:	<i>⊘</i> Edit	≩ € Copy	Delete	Export

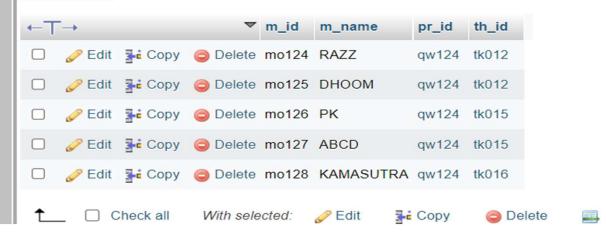
INSERTION IN THEATRE

```
INSERT INTO theatre(t_id,t_name,locations) VALUES ("tk012","YASH RAJ CINEMA","MUMBAI");
INSERT INTO theatre(t_id,t_name,locations) VALUES ("tk011","2D Entertainment","CHENNAI");
INSERT INTO theatre(t_id,t_name,locations) VALUES ("tk014","TALKIES Films","MUMBAI");
INSERT INTO theatre(t_id,t_name,locations) VALUES ("tk015","COMPLEX THEATRE","MUMBAI");
INSERT INTO theatre(t_id,t_name,locations) VALUES ("tk016","RA MANDIR","MUMBAI");
```



INSERTION IN MOVIE

```
INSERT INTO movie(m_id,m_name,pr_id,th_id) VALUES ("mo124","RAZZ","qw124","tk012");
INSERT INTO movie(m_id,m_name,pr_id,th_id) VALUES ("mo121","DH00M","qw124","tk012");
INSERT INTO movie(m_id,m_name,pr_id,th_id) VALUES ("mo125","PK","qw124","tk015");
INSERT INTO movie(m_id,m_name,pr_id,th_id) VALUES ("mo126","ABCD","qw124","tk015");
INSERT INTO movie(m_id,m_name,pr_id,th_id) VALUES ("mo127","KAMASUTRA","qw124","tk016");
```



INSERTION IN TICKETS

```
INSERT INTO tickets(ticket_id,movie_date,movie_time,th_id,movie_id) VALUES ("87650","2022-02-15","10:01:00","tk012","mo124");

INSERT INTO tickets(ticket_id,movie_date,movie_time,th_id,movie_id) VALUES ("87651","2022-02-10","10:10:00","tk012","mo124");

INSERT INTO tickets(ticket_id,movie_date,movie_time,th_id,movie_id) VALUES ("87652","2022-02-18","11:01:00","tk015","mo124");

INSERT INTO tickets(ticket_id,movie_date,movie_time,th_id,movie_id) VALUES ("87654","2022-02-17","12:01:00","tk015","mo124");

INSERT INTO tickets(ticket_id,movie_date,movie_time,th_id,movie_id) VALUES ("87655","2022-02-16","14:01:00","tk016","mo124");
```



INSERTION IN SEATS

```
INSERT INTO seats(seat_no,th_id,availabilityy,seat_type) VALUES ("87652","tk012","YES","G");
INSERT INTO seats(seat_no,th_id,availabilityy,seat_type) VALUES ("87678","tk012","YES","G");
INSERT INTO seats(seat_no,th_id,availabilityy,seat_type) VALUES ("87426","tk015","YES","G");
INSERT INTO seats(seat_no,th_id,availabilityy,seat_type) VALUES ("87620","tk015","YES","G");
INSERT INTO seats(seat_no,th_id,availabilityy,seat_type) VALUES ("87654","tk016","YES","G");
```



INSERTION IN ACTORS

```
1 INSERT INTO actors(a_id,a_name) VALUES ("ABCDE","Akshay");
      2 INSERT INTO actors(a id,a name) VALUES ("ABCDF", "Akash");
      3 INSERT INTO actors(a_id,a_name) VALUES ("ABCDG","Asaram");
      4 INSERT INTO actors(a_id,a_name) VALUES ("ABCDH","Asneet");
      5 INSERT INTO actors(a_id,a_name) VALUES ("ABCDI","Aay");
Extra options
\leftarrow T \rightarrow
                      ▼ a_id
                              a_name

    Ø Edit 
    ♣ Copy    O Delete ABCDF Akash

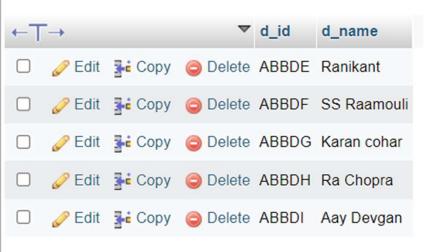
    Ø Edit 
    ♣ Copy    O Delete ABCDH Asneet

    Ø Edit 
    ♣ Copy    O Delete ABCDI Aay

      Check all
                 With selected:
                             Edit
                                     3-6 (
```

INSERTION IN DIRECTORS

```
INSERT INTO directors(d_id,d_name) VALUES ("ABBDE","Ranikant");
INSERT INTO directors(d_id,d_name) VALUES ("ABBDF","SS Raamouli");
INSERT INTO directors(d_id,d_name) VALUES ("ABBDG","Karan cohar");
INSERT INTO directors(d_id,d_name) VALUES ("ABBDH","Ra Chopra");
INSERT INTO directors(d_id,d_name) VALUES ("ABBDI","Aay Devgan");
```



INSERTION IN CUSTOMER

```
INSERT INTO customer(c_id,c_name,email,tkt_id) VALUES ("vBCDE","Akshay","asd@gmail.com","87650");
INSERT INTO customer(c_id,c_name,email,tkt_id) VALUES ("vBCDF","Akash","akash@gmail.com","87651");
INSERT INTO customer(c_id,c_name,email,tkt_id) VALUES ("vBCDG","Asaram","asaram@gmail.com","87652");
INSERT INTO customer(c_id,c_name,email,tkt_id) VALUES ("vBCDH","Asneet","asneet@gmail.com","87654");
INSERT INTO customer(c_id,c_name,email,tkt_id) VALUES ("vBCDI","Aay","abhay@gmail.com","87655");
```

←T	_→		~	c_id	c_name	email	tkt_id
	Edit	≩ Copy	Delete	vBCDE	Akshay	asd@gmail.com	87650
	Edit	≩ Copy	Delete	vBCDF	Akash	akash@gmail.com	87651
	Edit	≩ Copy	Delete	vBCDG	Asaram	asaram@gmail.com	87652
	Edit	≩ Copy	Delete	vBCDH	Asneet	asneet@gmail.com	87654
	Edit	≩ Copy	Delete	vBCDI	Aay	abhay@gmail.com	87655

INSERTION IN PAYMENT

Futur autiens

```
INSERT INTO payment(ref_id,payment_type,payment_status,payment_date,amount,cm_id) VALUES ("PMT01","CASH","YES","2022-02-15",50.00,"vBCDE");

INSERT INTO payment(ref_id,payment_type,payment_status,payment_date,amount,cm_id) VALUES ("PMT02","CARD","PENDING","2022-02-15",400.00,"vBCDF");

INSERT INTO payment(ref_id,payment_type,payment_status,payment_date,amount,cm_id) VALUES ("PMT03","UPI","PENDING","2022-02-15",250.00,"vBCDG");

INSERT INTO payment(ref_id,payment_type,payment_status,payment_date,amount,cm_id) VALUES ("PMT04","DEBIT CARD","FAILED","2022-02-15",120.00,"vBCDH");

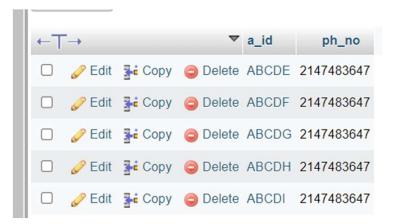
INSERT INTO payment(ref_id,payment_type,payment_status,payment_date,amount,cm_id) VALUES ("PMT05","EMI","SUCCESSFUL","2022-02-15",100.00,"vBCDI");
```

Extra	a options										
←Ţ	_→		~	ref_id	payment_f	type	paymo	ent_status	payment_da	te amount	cm_id
	Edit	≩ € Сору	Delete	PMT01	CASH		YES		2022-02-15	50	vBCDE
	Edit	≩ сору	Delete	PMT02	CARD		PEND	ING	2022-02-15	400	vBCDF
	Edit	Copy	Delete	PMT03	UPI		PEND	ING	2022-02-15	250	vBCDG
	Edit	≩ Copy	Delete	PMT04	DEBIT CAF	RD	FAILE	D	2022-02-15	120	vBCDH
	Edit	≩ сору	Delete	PMT05	EMI		SUCC	ESSFUL	2022-02-15	100	vBCDI
_	_ 🗆 0	check all	With sele	cted:	<i>P</i> Edit	≩ € Cop	ру	Delete	Export		

INSERTION IN GENRE

INSERTION IN ACT PHONE NUMBER

```
INSERT INTO act_ph(a_id,ph_no) VALUES ("ABCDE","8107054864");
INSERT INTO act_ph(a_id,ph_no) VALUES ("ABCDF","8765000124");
INSERT INTO act_ph(a_id,ph_no) VALUES ("ABCDG","4765000124");
INSERT INTO act_ph(a_id,ph_no) VALUES ("ABCDH","6765000124");
INSERT INTO act_ph(a_id,ph_no) VALUES ("ABCDH","5765000124");
INSERT INTO act_ph(a_id,ph_no) VALUES ("ABCDI","5765000124");
```



INSERTION IN DIRECTOR PHONE NUMBER

```
1 INSERT INTO direct_ph(d_id,ph_no) VALUES ("ABBDE","5765002124");
  2 INSERT INTO direct_ph(d_id,ph_no) VALUES ("ABBDF","5645000124");
  3 INSERT INTO direct_ph(d_id,ph_no) VALUES ("ABBDG","6765000124");
  4 INSERT INTO direct_ph(d_id,ph_no) VALUES ("ABBDH","2765000124");
  5 INSERT INTO direct_ph(d_id,ph_no) VALUES ("ABBDI","5765111124");
\leftarrow T \rightarrow
                        ▼ d_id
                                    ph_no

    Ø Edit  
    ♣ Copy  
    Opelete ABBDG 2147483647

⊘ Edit 

♣ Copy 

○ Delete ABBDI 2147483647

       Check all
                   With selected: 

Edit
                                         Copy Copy
                                                              Export
                                                   Delete
```

INSERTION IN CUSTOMER PHONE NUMBER

```
1 INSERT INTO customer_ph(c_id,cph_no) VALUES ("vBCDE","5765002124");
   2 INSERT INTO customer_ph(c_id,cph_no) VALUES ("vBCDF","0065662124");
   3 INSERT INTO customer_ph(c_id,cph_no) VALUES ("vBCDG","0005012124");
   4 INSERT INTO customer_ph(c_id,cph_no) VALUES ("vBCDH","0000102124");
   5 INSERT INTO customer_ph(c_id,cph_no) VALUES ("vBCDI","0000006664");
\leftarrow T \rightarrow
                       ▼ c_id
                                 cph_no
☐ Ø Edit ♣ Copy ☐ Delete vBCDE 2147483647
☐ Ø Edit ♣ Copy ☐ Delete vBCDF
                                 65662124
☐ Ø Edit ♣ Copy 		 □ Delete vBCDG
                                  5012124
☐ Ø Edit ♣ Copy 	 □ Delete vBCDH
                                   102124
6664
      ☐ Check all
                  With selected:
                              Edit
                                      3 € Copy
                                                 Delete
                                                           Export
```

INSERTION IN CUSTOMER TICKET



INSERTION IN ACTS IN

```
INSERT INTO acts_in(m_id,a_id,roll) VALUES ("mo124","ABCDE","hero");

INSERT INTO acts_in(m_id,a_id,roll) VALUES ("mo124","ABCDF","villian");

INSERT INTO acts_in(m_id,a_id,roll) VALUES ("mo124","ABCDG","co hero");

INSERT INTO acts_in(m_id,a_id,roll) VALUES ("mo124","ABCDH","heroine");

INSERT INTO acts_in(m_id,a_id,roll) VALUES ("mo124","ABCDI","side hero");
```



INSERTION IN DIRECTS IN

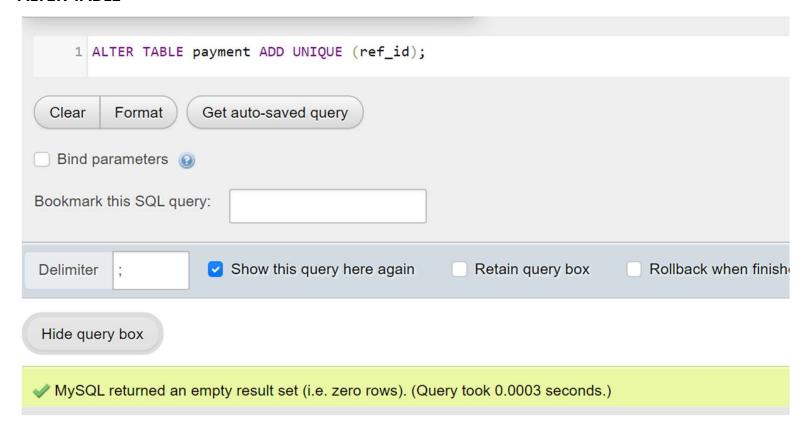
```
1 INSERT INTO directs_in(m_id,d_id,year) VALUES ("mo124","ABBDE",2022);
    2 INSERT INTO directs_in(m_id,d_id,year) VALUES ("mo124","ABBDF",2005);
    3 INSERT INTO directs_in(m_id,d_id,year) VALUES ("mo124","ABBDG",2004);
   4 INSERT INTO directs_in(m_id,d_id,year) VALUES ("mo124","ABBDH",2007);
    5 INSERT INTO directs_in(m_id,d_id,year) VALUES ("mo124","ABBDI",2008);
\leftarrow T \rightarrow
                      ▼ m_id d_id
                                    year
2022
☐ Ø Edit ♣ Copy ☐ Delete mo124 ABBDF
                                     2005

    Ø Edit 
    ♣ Copy    Opelete mo124 ABBDG 2004

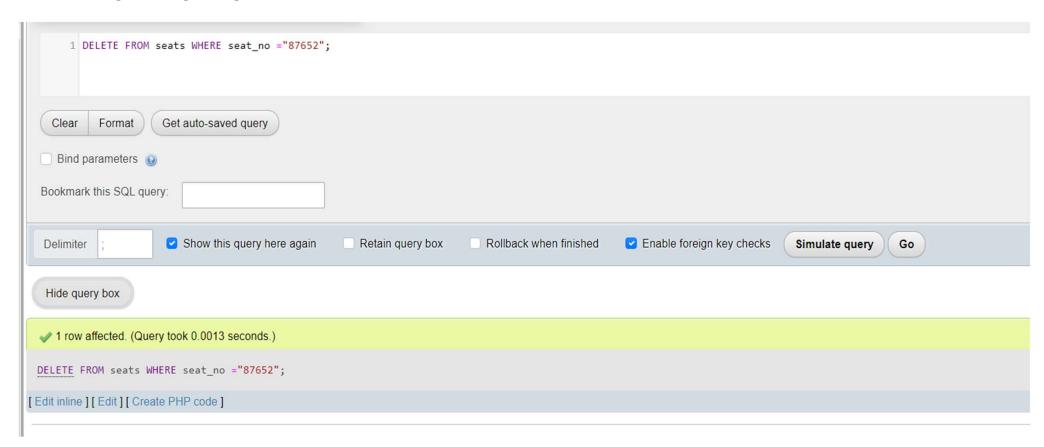
    Ø Edit 
    ♣ Copy    O Delete mo124 ABBDH 2007

☐ Ø Edit ♣ Copy ☐ Delete mo124 ABBDI
                                     2008
     Check all
                 With selected:
                             Edit
                                      Copy
                                               Delete
                                                         Export
```

OPERATIONS IN DATABASE-: ALTER TABLE

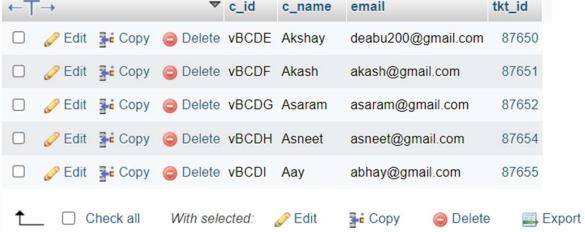


DELETE INFORMATION FROM TABLE



UPDATE, WHERE





EXISTS

```
1 SELECT m_name
 2 FROM movie
 3 WHERE EXISTS
 4 (SELECT * FROM theatre WHERE theatre.t_id = movie.th_id);
\leftarrow T \rightarrow
                m_name
☐ Ø Edit ♣ Copy 	 Delete PK
↑ Check all With selected: Ø Edit
                         Copy Copy
                               Delete
                                     Export
```

VIEW

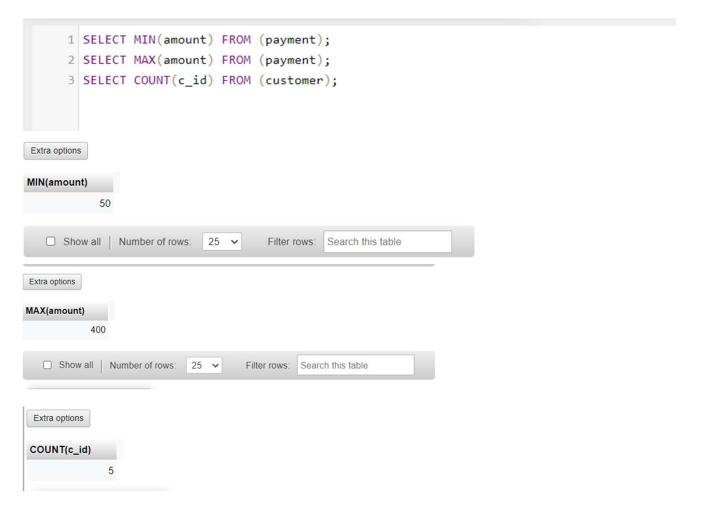
```
Run SQL query/queries on table assg3_b200826cs.movie:

1 CREATE VIEW PC as
2 SELECT p_name, headquarters
3 FROM production_company
4 WHERE p_id = "qw125";

Run SQL query/queries on table assg3_b200826cs.movie: 

1 DROP VIEW PC;
```

MIN, MAX, COUNT AND AGGREGEATE

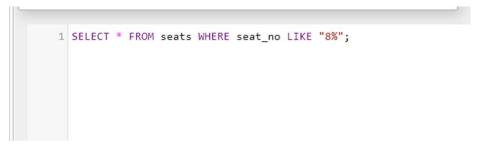


AUTO INCREMENT

```
ALTER TABLE `seats`

MODIFY `seat_no` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=8;
```

LIKE CLAUSE





HAVING BY

```
1 SELECT seat_type as Seattype, COUNT(seat_no) as Seats
2 FROM seats
3 GROUP BY seat_type
4 HAVING COUNT(seat_no) > 1;
```



GROUP BY

```
SELECT payment_type as PAID_THROUGH, COUNT(ref_id) as Total_Customers
FROM payment
GROUP BY payment_type
ORDER BY COUNT(ref_id) desc;
```

PAID_THROUGH	Total_Customers
CARD	1
ЕМІ	1
CASH	1
DEBIT CARD	1
UPI	1