PRINCESS NORA BINT ABDULRAHMAN UNIVERSITY

College of Computer and Information Sciences

Department of Information Systems

Vox cinema

Phase 1& Phase 2

Serial#	Section #	NAME	ID
	3w1	*Norah Abdulrahman Aleyadah*	*442003193*
	3w1	*Nada Hamad Alotaibi*	*442003374*
	3w1	*Monerah Ibrahim Almobarak*	*442002988*
	3w1	*Wafa hobani*	*442002832*
	3w1	*Joud Almutairi*	*442002548*
	3w1	*Sarah abdulaziz altaweel*	*442000786*

Group: 3

Supervised By: Anfal Alkagtani

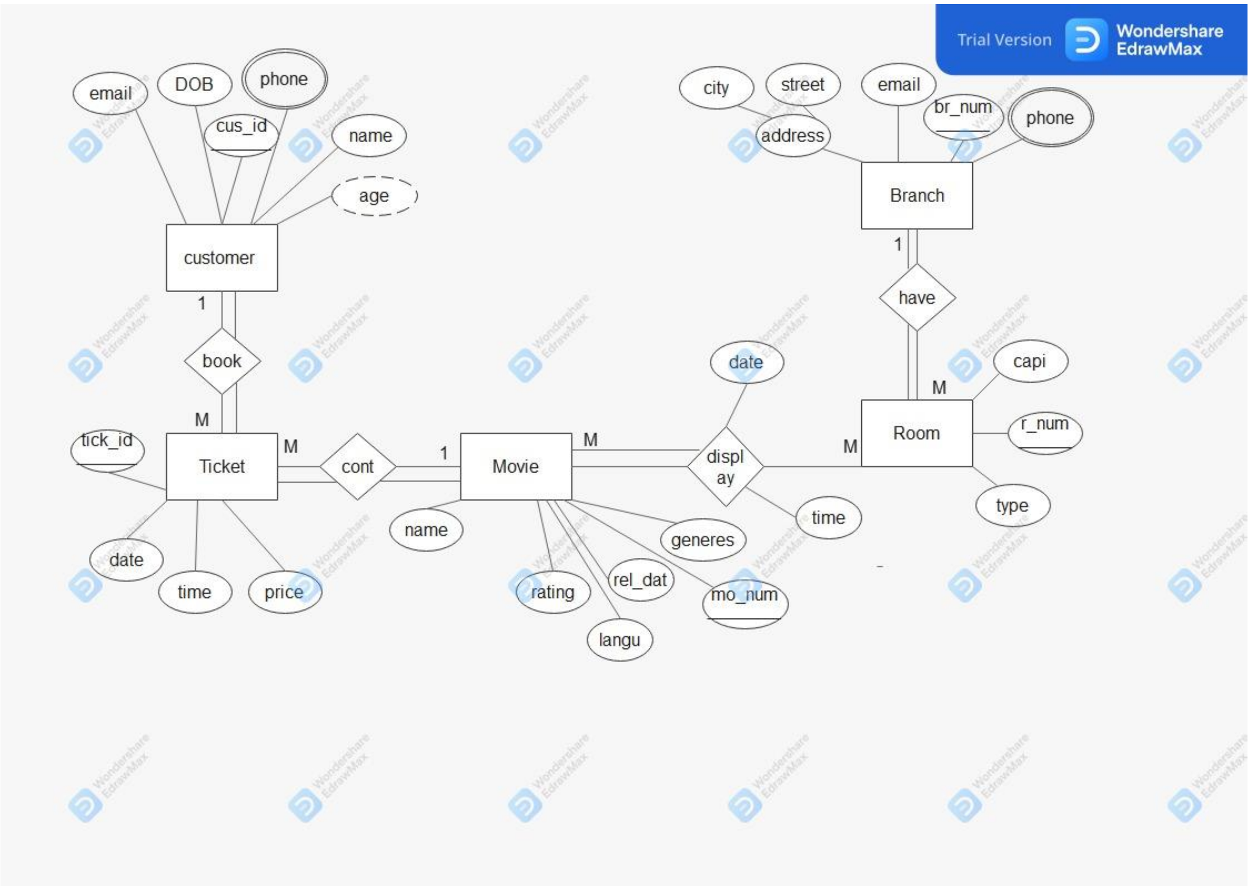
Project Description:

VOX Cinemas is a chain of theatres and cinemas operating in the Middle East and operated by Majid Al Futtaim Group in the UAE. Majid Al Futtaim has 129 cinema screens across the UAE, Qatar, Lebanon, Egypt, Oman, Bahrain, and Saudi Arabia under the VOX Cinemas brand.

The database for VOX Cinemas company:

VOX Cinemas displays the movies in rooms. Each Movie has a unique movie number, time, rating, name, language, release data, genres. Each room has a unique room number, type, capacity. The movie can be displayed in more than one room at least one, but each room can show only one movie. - Each branch has a unique branch number, address (City, Street), Several phone numbers, email. A branch must have many rooms. However, a room should only be for one branch. -Each ticket has a ticket id, date, time, price. The ticket must contain a description of only one movie, and the movie should have multiple entry tickets. - Each customer has a unique customer id, name, Several phone numbers, date of birth, age, and email. The customer should book one ticket, and each ticket must be for only one customer.

Entity Relationship Diagram (ERD):



Relational Schema:

Branch (br_num, email, street, city)

BranchPhone (br_num, phone)

FK: br_num references Branch (br_num)

Room(r_num ,capi,type , br_num)

FK: br_num references Branch (br_num)

Movie(m_num , name , rating, langu ,rel_dat, generes)

Movie_Room(mo_num , r_num , date,time)

Fk1: mo_num references Movie(mo_num)

FK2: r_num references Room(r_num)

Customer (cus_id , name , DOB , email)

CustomerPhone (cus_id , phone)

FK: cus_id reference Customer(cus_id)

Ticket(tick_id ,date ,time ,price ,mo_num, cus_id)

FK1: mo_num references Movie(mo_num)

FK2: cus_id reference Customer (cus_id)

DDL Commands:

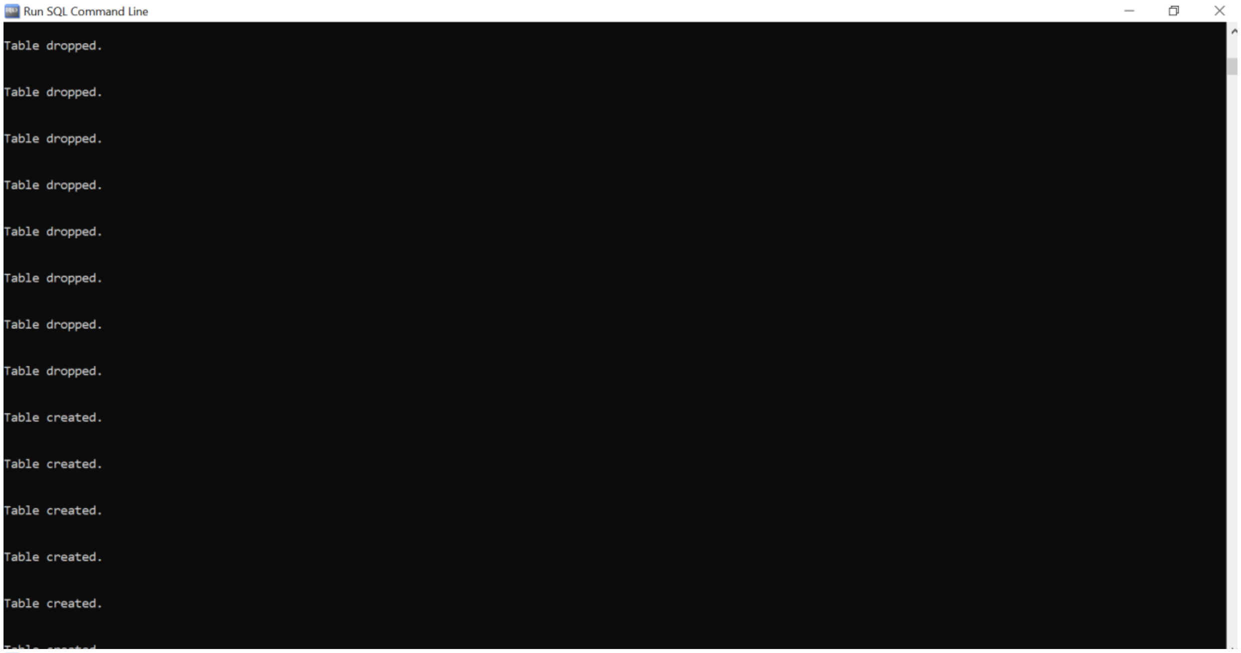
```
--for design only --
 set linesize 150;
--only for the erorr--
drop table Branch CASCADE CONSTRAINTS;
drop table BranchPhone CASCADE CONSTRAINTS;
drop table Room CASCADE CONSTRAINTS;
drop table Movie CASCADE CONSTRAINTS;
drop table Movie_Room CASCADE CONSTRAINTS;
drop table Customer CASCADE CONSTRAINTS;
drop table CustomerPhone CASCADE CONSTRAINTS;
drop table Ticket CASCADE CONSTRAINTS;
-----------the creation of the tables (( First Point))-----------
Create table Branch
(
br_num char(3) PRIMARY KEY,
email varchar2 (100) UNIQUE,
street varchar2 (100),
city varchar2(50)
);

create table BranchPhone
(
br_num char(3),
phone number (9) ,
constraint br_PK PRIMARY KEY(br_num , phone ) ,
CONSTRAINT br_FK FOREIGN KEY (br_num) REFERENCES Branch (br_num)
);

create table Room
(
r_num char(3) PRIMARY KEY,
capi number(3) ,
r_type varchar2(20),
br_num char(3),
CONSTRAINT br_FK2 FOREIGN KEY (br_num) REFERENCES Branch (br_num)
);

create table Movie
(
m_num  char(3) primary key,
rating number(10,5) ,
langu varchar2(20),
rel_dat DATE,
generes varchar2(35)
);

create table Movie_Room
(
m_num char(3) ,
r_num char(3),
date_m DATE , --the INSERT part we are not sure about it (we did from outside the book method)--
duration VARCHAR2(20)  ,-- the Movie duration like 1h 43m or 2h 0m (2h)--
constraint mr_PK PRIMARY KEY(m_num , r_num ) ,
constraint m_fk foreign key (m_num) references Movie(m_num),
constraint r_fk foreign key (r_num) references Room(r_num)
 );

create table Customer
(
cus_id CHAR(10)   primary key ,
name varchar2(10) not null ,
DOB date not null,
email varchar2(30) not null
);
```

```
create table CustomerPhone
(
cus_id CHAR(10) ,
phone varchar2(10) ,
constraint cp_PK PRIMARY KEY(cus_id , phone ) ,
constraint cp_fk foreign key (cus_id) references Customer(cus_id)
);

create table Ticket
(
tick_id CHAR(5) primary key,
date_t date ,  --the INSERT part we are not sure about it (we did from outside the book method)--
time_t TIMESTAMP , --the INSERT part we are not sure about it (we did from outside the book method)--
price number(2) check(price<=90) ,
m_num  char(3),
cus_id CHAR(10),
constraint m_fk2 foreign key (m_num)references Movie (m_num),
constraint cus_fk2 foreign key (cus_id)references Customer(cus_id)
);
-----------------------The Insert (( Second Point ))-----------------------
INSERT INTO Branch VALUES ('333','soltan@gamil.com','King Fahad Road','Riyadh');
INSERT INTO Branch VALUES ('154','salma@gamil.com','Olaya Street','Riyadh');
INSERT INTO Branch VALUES ('486','ibrahem@gamil.com','King Fahad Road','Jeddah');

INSERT INTO BranchPhone VALUES ( '333' , 554477554 );
INSERT INTO BranchPhone VALUES ( '154' , 556677441 );
INSERT INTO BranchPhone VALUES ( '486' , 557724682 );

INSERT INTO Customer VALUES ( '11154785' , 'Salman' ,(TO_DATE ('05-07-1995','DD-MM-YYYY')), 'salman@gamil.com');
INSERT INTO Customer VALUES ( '11454834' , 'Sara' ,(TO_DATE ('07-10-1995','DD-MM-YYYY')), 'Sara@gamil.com');
INSERT INTO Customer VALUES ( '55149327' , 'Faten' ,(TO_DATE ('06-07-1995','DD-MM-YYYY')), 'Faten@gamil.com');

INSERT into CustomerPhone VALUES ( '11154785' , '0568451248');
INSERT into CustomerPhone VALUES ( '11454834' , '0568412578');
INSERT into CustomerPhone VALUES ( '55149327' , '0546851238');

INSERT INTO Room VALUES ('001' , 48, 'gold' , '154');
INSERT INTO Room VALUES ('002' , 48, 'standard' , '333');
INSERT INTO Room VALUES ('003' , 38, 'kids' , '154');

INSERT INTO Movie VALUES ('110' , 7.3, 'English' ,  TO_DATE ('18-Nov-2021','DD-Mon-YYYY' ), 'adventure' );
INSERT INTO Movie VALUES ('231' , 5.5 , 'Arabic' ,  TO_DATE ('28-Oct-2021','DD-Mon-YYYY') , 'comedy' );
INSERT INTO Movie VALUES ('310' , 9.4, 'English' ,  TO_DATE ('25-Nov-2021','DD-Mon-YYYY' ), 'animation' );

INSERT INTO Movie_Room VALUES ('110' , '001' , TO_DATE ('22-11-2021','dd-mm-yyyy') ,'2h 32m ' );
INSERT INTO Movie_Room VALUES ('231' , '002' , TO_DATE ('28-11-2021','dd-mm-yyyy') , '2h 28m');
INSERT INTO Movie_Room VALUES ('310' , '003' , TO_DATE ('23-11-2021','dd-mm-yyyy') , '2h' );

INSERT INTO Ticket VALUES ('52123' , TO_DATE ('22-11-2021' ,'dd-mm-yyyy') , TO_TIMESTAMP('07:00','HH:MI') , 75, '110' , '11154785' );
INSERT INTO Ticket VALUES ('42145' , TO_DATE ('28-11-2021' ,'dd-mm-yyyy') , TO_TIMESTAMP('12:00','HH:MI') , 50, '231' , '11454834' );
INSERT INTO Ticket VALUES ('72230' , TO_DATE ('28-11-2021' ,'dd-mm-yyyy') , TO_TIMESTAMP('01:20','HH:MI') , 55, '310' , '55149327' );
```

```
-------------the third point part one------------------
--This query will display all rows where the language of the movie in table movie is in English--
SELECT * FROM Movie
WHERE langu LIKE 'English';

--This query will display all the rows where the price of the ticket in table ticket is greater than 50--
SELECT * FROM Ticket
WHERE price > 50;

--This query will display all the rows where the cpacity of the room in table room is equal to 48 and ordered by the room number--
SELECT * FROM Room
WHERE capi = 48
ORDER BY r_num;
-------------the third point part two------------------

-- This query will display all the rows from tabel branch --
select count(*)
from Branch ;

--This query will divide the cities into groups, showing the number of branches in each city --
select city ,count(br_num)
from Branch
group by city ;

--This query will split the movie table into qroups according to languages and calculate the maximum rating greater than 7 --
select langu , max(rating)
from Movie
group by langu
having max(rating) > 7;
```

```
-----------------To show all the work------------------
SELECT * FROM Customer ;
SELECT * FROM Ticket ;
SELECT * FROM Movie_Room ;
SELECT * FROM Movie ;
SELECT * FROM Room ;
SELECT * FROM Branch ;
SELECT * FROM BranchPhone ;
SELECT * FROM CustomerPhone ;

DESC Customer;
DESC Ticket;
DESC Movie_Room;
DESC Movie;
DESC Room;
DESC Branch;
DESC BranchPhone;
DESC CustomerPhone;
```

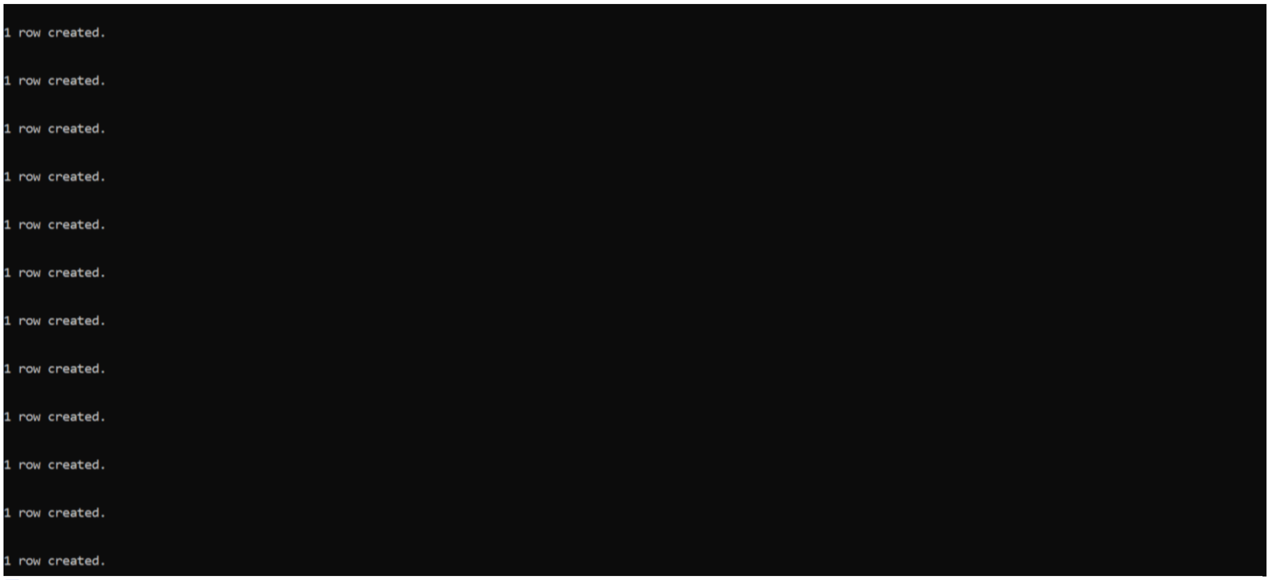
Create DB tables using DDL statements from the relational schema.



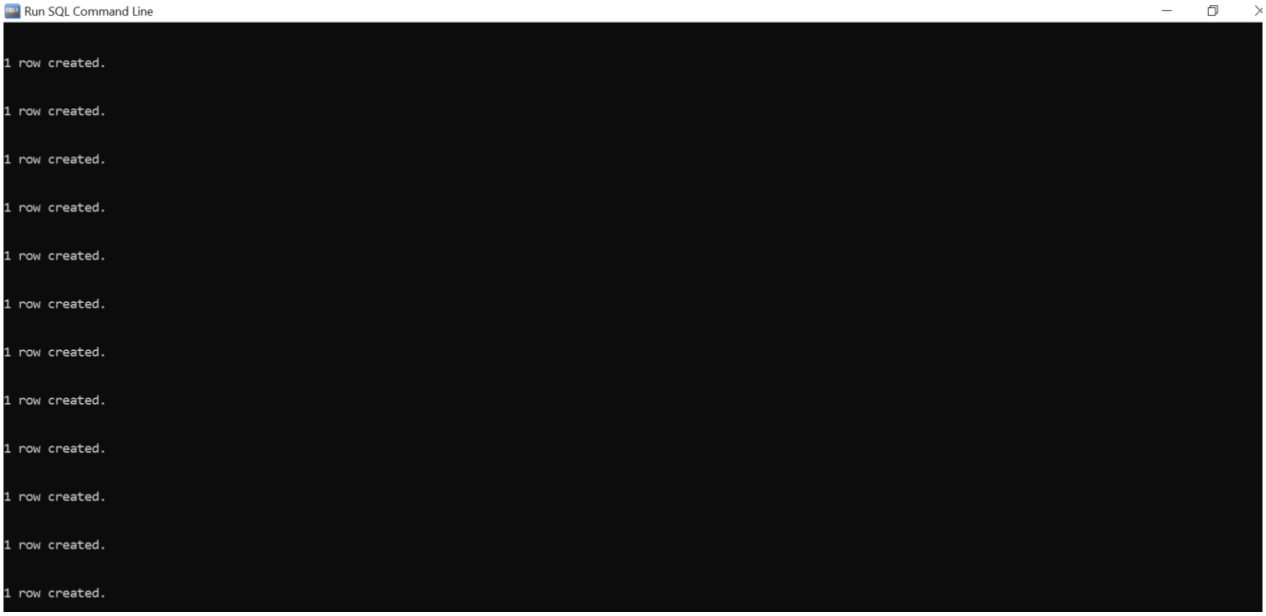
```
Table dropped.

Table dropped.

Table dropped.

Table dropped.

Table dropped.

Table dropped.

Table dropped.

Table dropped.

Table created.

Table created.

Table created.

Table created.

Table created.
```

```
Table created.

Table created.
```

Insert 3 rows ***AT LEAST INTO EACH TABLE***.



```
1 row created.

1 row created.

1 row created.

1 row created.

1 row created.

1 row created.

1 row created.

1 row created.

1 row created.

1 row created.

1 row created.

1 row created.
```



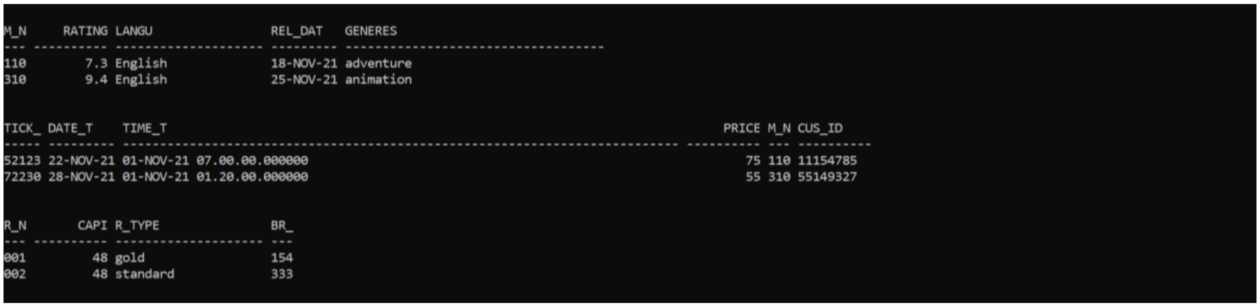
```
1 row created.

1 row created.

1 row created.

1 row created.

1 row created.

1 row created.

1 row created.

1 row created.

1 row created.

1 row created.

1 row created.

1 row created.
```

DML Commands:

Write and execute six data queries:

Three quires from **lecture9 part 1**:

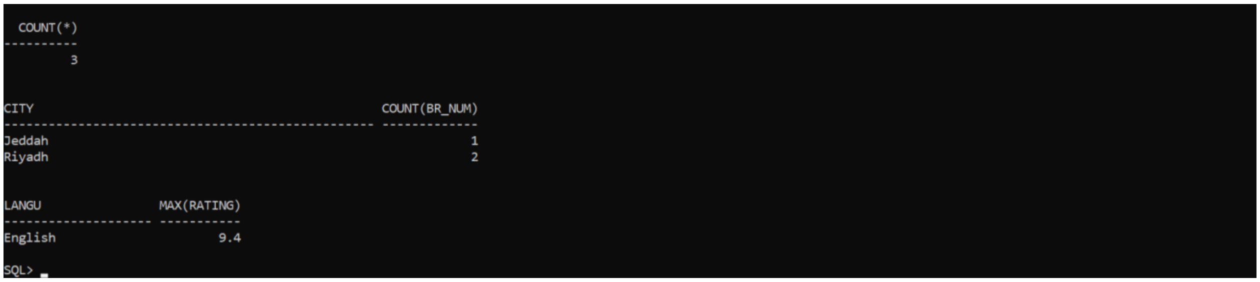
All of them should include ***where*** *clause*



```
M_N     RATING LANGU                REL_DAT   GENERES
--- ---------- -------------------- --------- -----------------------------------
110        7.3 English              18-NOV-21 adventure
310        9.4 English              25-NOV-21 animation


TICK_ DATE_T    TIME_T                                                                           PRICE M_N CUS_ID
----- --------- --------------------------------------------------------------------------- ---------- --- ----------
52123 22-NOV-21 01-NOV-21 07.00.00.000000                                                           75 110 11154785
72230 28-NOV-21 01-NOV-21 01.20.00.000000                                                           55 310 55149327


R_N       CAPI R_TYPE               BR_
--- ---------- -------------------- ---
001         48 gold                 154
002         48 standard             333
```

Three quires from **lecture9 part 2**:

At least one of them should include ***group by clause***, and **one of them** should include ***group by and having clauses.***



```
  COUNT(*)
----------
         3


CITY                                               COUNT(BR_NUM)
-------------------------------------------------- -------------
Jeddah                                                         1
Riyadh                                                         2


LANGU                MAX(RATING)
-------------------- -----------
English                      9.4

SQL> _
```

Work Distribution:

NAME	ID	Percentage	WORK
Norah Abdulrahman Aleyadah	*442003193*	*100%*	*Defining entities relationship and attributes* *Mapping relations* *Three quires from lecture9 part 1*
Nada Hamad Alotaibi	*442003374*	*100%*	*Writing project description* *Mapping relations* *Insert 3 rows at least into each table.*
Monerah Ibrahim Almobarak	*442002988*	*100%*	*Writing project description* *Mapping relations* *Create DB tables using DDL statements from the relational schema.*
Wafa hobani	*442002832*	*100%*	*Drawing the ERD* *Mapping relations* *Create DB tables using DDL statements from the relational schema.*
Joud Almutairi	*442002548*	*100%*	*Drawing the ERD* *Mapping relationg* *Three quires from lecture9 part 2*
Sarah abdulaziz Altaweel	*442000786*	*100%*	*Defining entities relationship and attributes* *Mapping relations* *Insert 3 rows at least into each table.*