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Course:- DBMS(CS310)

Task:- Assignment-5 (Restaurant Database)

Aim :

The task for this assignment is to create a database for a restaurant with various entities and perform many useful operation on that table to retrieve, update, modify, delete , the rows of data with conditions.

SQL Code Snippet :

use mysql;

create table partof

(mealid int , itemid int , quantity numeric(3), discount numeric(3),

primary key(mealid, itemid));

describe partof;

create table meals

(mealid int , name varchar(20), discription varchar (40),

primary key(mealid));

describe meals;

create table ads

(slogan varchar(60));

describe ads;

create table menuitems

(itemid int, name varchar(20), price numeric(3), dateadded date,

primary key(itemid));

describe menuitems;

create table madewith

```sql
(itemid int, ingredientid int, quantity numeric(3),

primary key(itemid, ingredientid) );

describe madewith;

create table ingredients

( ingredientid int, name varchar(20), unit numeric(2), unitprice numeric(3),

foodgroup varchar(20), inventory numeric(4), vendorid int,

primary key(ingredientid) );

describe ingredients;

create table vendor

(vendorid int, companyname varchar(30), repfname varchar(30), replname varchar(30),

referredby varchar(40),

primary key(vendorid) );

describe vendor;

alter table partof

add foreign key(mealid) references meals(mealid);

alter table partof

add foreign key(itemid) references menuitems(itemid);

alter table madewith

add foreign key(itemid) references menuitems(itemid);

alter table madewith

add foreign key(ingredientid) references ingredients(ingredientid);

alter table ingredients

add foreign key(vendorid) references vendor(vendorid);

alter table ingredients

modify column inventory numeric(4);

insert into meals values(1, 'panir butter masala', "it is made of panir and butter");

insert into meals values(2, 'Chicken chili', "it is a nonveg item");
```

```
insert into meals values(3, 'nanroti_mashroom', "mashroom items");

insert into meals values(4, 'dalfry_roti', 'it is a simple low cost meals');

select * from meals;

insert into menuitems values(1, 'mashroom butter', 120, '2012-04-05');

insert into menuitems values(2, 'paneerChili', 70, '2018-11-03');

insert into menuitems values(3, 'champaranmutton', 380, '2020-06-01');

insert into menuitems values(4, 'chickenkabab', 90, '2011-03-09');

select * from menuitems;

insert into partof values(1, 1, 50, 10);

insert into partof values(2, 3, 120, 12);

insert into partof values(3, 4, 150, 15);

insert into partof values(4, 2, 140, 7);

select * from  partof;

insert into vendor values(1, 'zomata', 'Alex', 'mic', 'jon');

insert into vendor values(2, 'messty', 'jekky', 'cod', 'menis');

insert into vendor values(3, 'keny', 'Alder_dussan', 'k', 'getly');

insert into vendor values(4, 'jubby', 'tom', 'joc', 'met_aser');

select * from vendor;

alter table ingredients

modify column unit numeric(2);

insert into ingredients values(1, 'kastoori', 5, 70, 'cucumber', 80, 1);

insert into ingredients values(2, 'kemar', 3, 100, 'mango', 300, 2);

insert into ingredients values(3, 'dudumby', 5, 120, 'grape', 140, 3);

insert into ingredients values(4, 'oniontomatogajar', 8, 80, 'salad', 150, 4);

select * from ingredients;

insert into madewith values(1, 1, 50);

insert into madewith values(2, 2, 70);
```

```sql
insert into madewith values(3, 3, 100);

insert into madewith values(4, 4, 150);

select * from madewith;

/* id of vendor who suplies grapes*/

select * from ingredients

where foodgroup='grape' ;

select ingredientid, name, inventory from ingredients

where inventory > 100;

select foodgroup from ingredients

where foodgroup != 'grape' ;

select ingredientid, name, unit, unitprice from ingredients

order by unitprice;

select itemid, name, max(dateadded) from menuitems ;

select repfname from vendor

where repfname regexp '[_]';

select * from ingredients

where foodgroup != 'salad' ;

select ingredientid, name , unit from ingredients

where unit > 1 ;

select avg(price)

from menuitems;

select sum(price)

from menuitems;

select sum(unit)

from ingredients;

select min(unitprice)

from ingredients;
```

select   max(unitprice)

from ingredients;

select itemid, name, price from menuitems

order by(price) desc;

Screenshots of Codes and Tables:

Screenshot 1 — SQL File 4 (top window):

```
76   select * from ingredients
77   where foodgroup='grape' ;
78   select ingredientid, name, inventory from ingredients
79   where inventory > 100;
80   select foodgroup from ingredients
81   where foodgroup != 'grape' ;
```

Result Grid:

foodgroup
cucumber
mango
salad

Action Output:

#	Time	Action	Message	Duration / Fetch
76	07:48:40	select * from ingredients where foodgroup='grape' LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec
77	07:50:48	select ingredientid, name, inventory from ingredients where inventory > 100 LIMIT 0, 1000	3 row(s) returned	0.031 sec / 0.000 sec
78	08:02:43	select foodgroup from ingredients where foodgroup =! 'grape'	Error Code: 1064. You have an error in your SQL syntax; check the manual that corresponds ...	0.000 sec
79	08:05:12	select foodgroup from ingredients where foodgroup != 'grape' LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec

Screenshot 2 — SQL File 4 (bottom window):

```
78   select ingredientid, name, inventory from ingredients
79   where inventory > 100;
80   select foodgroup from ingredients
81   where foodgroup != 'grape' ;
82   select ingredientid, name, unit, unitprice from ingredients
83   order by unitprice;
```

Result Grid:

ingredientid	name	unit	unitprice
1	kastoori	5	70
4	oniontomatogajar	8	80
2	kemar	3	100
3	dudumby	5	120
NULL	NULL	NULL	NULL

Action Output:

#	Time	Action	Message	Duration / Fetch
77	07:50:48	select ingredientid, name, inventory from ingredients where inventory > 100 LIMIT 0, 1000	3 row(s) returned	0.031 sec / 0.000 sec
78	08:02:43	select foodgroup from ingredients where foodgroup =! 'grape'	Error Code: 1064. You have an error in your SQL syntax; check the manual that corresponds ...	0.000 sec
79	08:05:12	select foodgroup from ingredients where foodgroup != 'grape' LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec
80	08:08:51	select ingredientid, name, unit, unitprice from ingredients order by unitprice LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec

Screen 1 (top):

```
79    where inventory > 100;
80 •  select foodgroup from ingredients
81    where foodgroup != 'grape' ;
82 •  select ingredientid, name, unit, unitprice from ingredients
83    order by unitprice;
84    select itemid, name, max(dateadded) from menuitems ;
```

Result Grid:

itemid	name	max(dateadded)
1	mashroom butter	2020-06-01

Action Output:

#	Time	Action	Message	Duration / Fetch
79	08:05:12	select foodgroup from ingredients where foodgroup != 'grape' LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec
80	08:08:51	select ingredientid, name, unit, unitprice from ingredients order by unitprice LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec
81	08:11:39	select max(dateadded) from menuitems LIMIT 0, 1000	1 row(s) returned	0.094 sec / 0.000 sec
82	08:12:19	select itemid, name, max(dateadded) from menuitems LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

Screen 2 (bottom):

```
82 •  select ingredientid, name, unit, unitprice from ingredients
83    order by unitprice;
84 •  select itemid, name, max(dateadded) from menuitems ;
85 •  select repfname from vendor
86    where repfname regexp '[_]' ;
87
```

Result Grid:

repfname
Alder_dussan

Action Output:

#	Time	Action	Message	Duration / Fetch
82	08:12:19	select itemid, name, max(dateadded) from menuitems LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec
83	08:13:17	select * from vendor LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec
84	08:18:52	select repfname from vendor where name regexp '[_]' LIMIT 0, 1000	Error Code: 1054. Unknown column 'name' in 'where clause'	0.172 sec
85	08:19:08	select repfname from vendor where repfname regexp '[_]' LIMIT 0, 1000	1 row(s) returned	0.109 sec / 0.000 sec

Screenshot 1 — MySQL Workbench

SQL editor:

```
84   select itemid, name, max(dateadded) from menuitems ;
85   select repfname from vendor
86   where repfname regexp '[_]';
87   select * from ingredients
88   where foodgroup != 'salad' ;
89
```

Result Grid:

ingredientid	name	unit	unitprice	foodgroup	inventory	vendorid
1	kastoori	5	70	cucumber	80	1
2	kemar	3	100	mango	300	2
3	dudumby	5	120	grape	140	3
NULL	NULL	NULL	NULL	NULL	NULL	NULL

ingredients 38

Action Output:

	#	Time	Action	Message	Duration / Fetch
❌	84	08:18:52	select repfname from vendor where name regexp '[_]' LIMIT 0, 1000	Error Code: 1054. Unknown column 'name' in 'where clause'	0.172 sec
✓	85	08:19:08	select repfname from vendor where repfname regexp '[_]' LIMIT 0, 1000	1 row(s) returned	0.109 sec / 0.000 sec
✓	86	08:20:00	select * from ingredients LIMIT 0, 1000	4 row(s) returned	0.015 sec / 0.000 sec
✓	87	08:21:03	select * from ingredients where foodgroup != 'salad' LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec

Screenshot 2 — MySQL Workbench

SQL editor:

```
86   where repfname regexp '[_]';
87   select * from ingredients
88   where foodgroup != 'salad' ;
89   select ingredientid, name , unit from ingredients
90   where unit > 1 ;
91
```

Result Grid:

ingredientid	name	unit
1	kastoori	5
2	kemar	3
3	dudumby	5
4	oniontomatogajar	8
NULL	NULL	NULL

ingredients 39

Action Output:

	#	Time	Action	Message	Duration / Fetch
✓	85	08:19:08	select repfname from vendor where repfname regexp '[_]' LIMIT 0, 1000	1 row(s) returned	0.109 sec / 0.000 sec
✓	86	08:20:00	select * from ingredients LIMIT 0, 1000	4 row(s) returned	0.015 sec / 0.000 sec
✓	87	08:21:03	select * from ingredients where foodgroup != 'salad' LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec
✓	88	08:23:42	select ingredientid, name , unit from ingredients where unit > 1 LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec

Screenshot 1 — SQL File 4*

```
88    where foodgroup != 'salad' ;
89 •  select ingredientid, name , unit from ingredients
90    where unit > 1 ;
91 •  select avg(price)
92    from menuitems;
93
```

Result Grid:

avg(price)
165.0000

Action Output:

#	Time	Action	Message	Duration / Fetch
●	89	08:25:54	select * from menuitems LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec
●	90	08:26:09	select * from ingredients LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec
●	91	08:27:51	select name, avg(price) from menuitems LIMIT 0, 1000	1 row(s) returned	0.032 sec / 0.000 sec
●	92	08:28:16	select avg(price) from menuitems LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

Screenshot 2 — SQL File 4*

```
97 •  select min(unitprice)
98    from ingredients;
99 •  select   max(unitprice)
100   from ingredients;
101 • select itemid, name, price from menuitems
102   order by(price) desc;
```
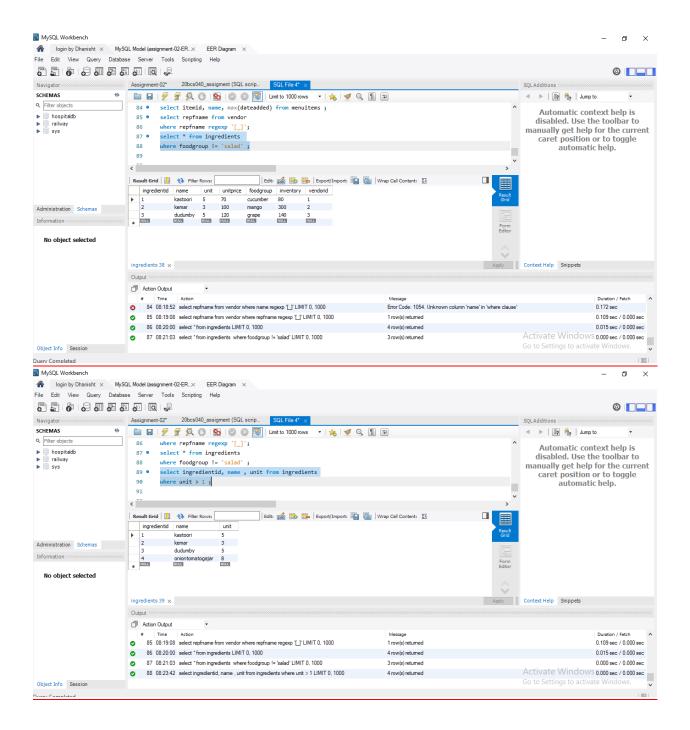
Result Grid:

itemid	name	price
3	champaranmutton	380
1	mashroom butter	120
4	chickenkabab	90
2	paneerChili	70
*	NULL	NULL	NULL

Action Output:

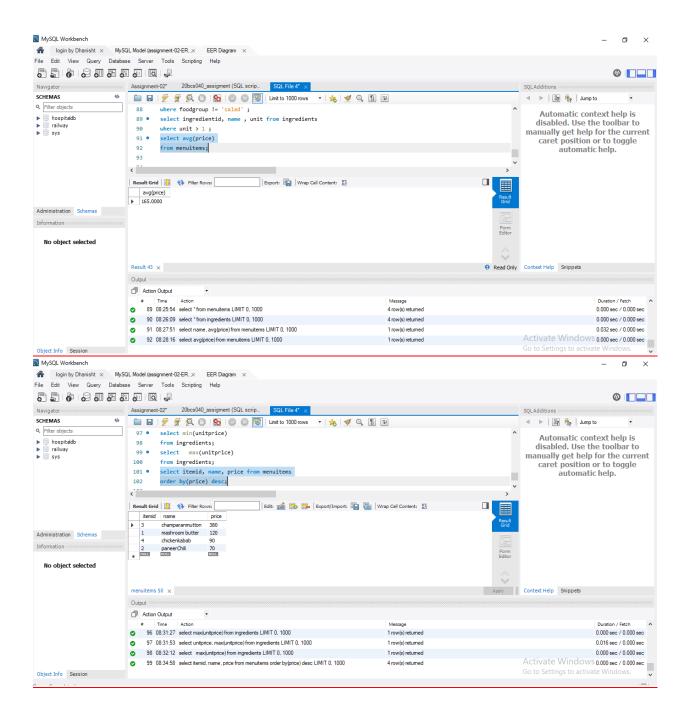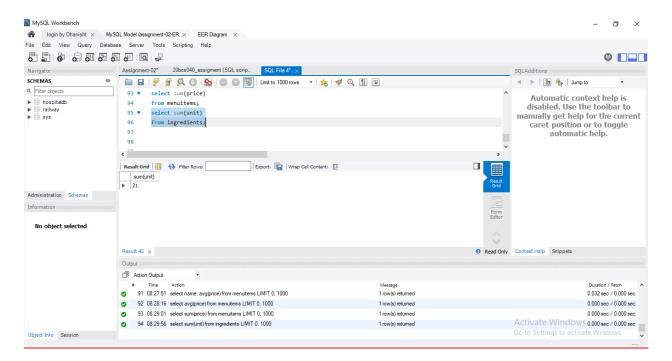| #	Time	Action	Message	Duration / Fetch
●	96	08:31:27	select max(unitprice) from ingredients LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec
●	97	08:31:53	select unitprice, max(unitprice) from ingredients LIMIT 0, 1000	1 row(s) returned	0.016 sec / 0.000 sec
●	98	08:32:12	select max(unitprice) from ingredients LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec
●	99	08:34:58	select itemid, name, price from menuitems order by(price) desc LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec

- Screenshots of all the commands and associated tables (above) by folowing all the instructions given in the assignment.