

SOUTHEAST UNIVERSITY



Department of Computer Science Engineering

PROJECT NAME: Mess management system

Course Code: CSE3012

Course Title: Database Design Lab

Submitted TO: Kimia Aksir

Designation: Lecturer

Submitted By: Name: Ahamadul Kabir tashfiq

ID: 2017000000072

Batch: 45th

Section: 06

Name: Md.Arif Hossain

ID: 2017000000004

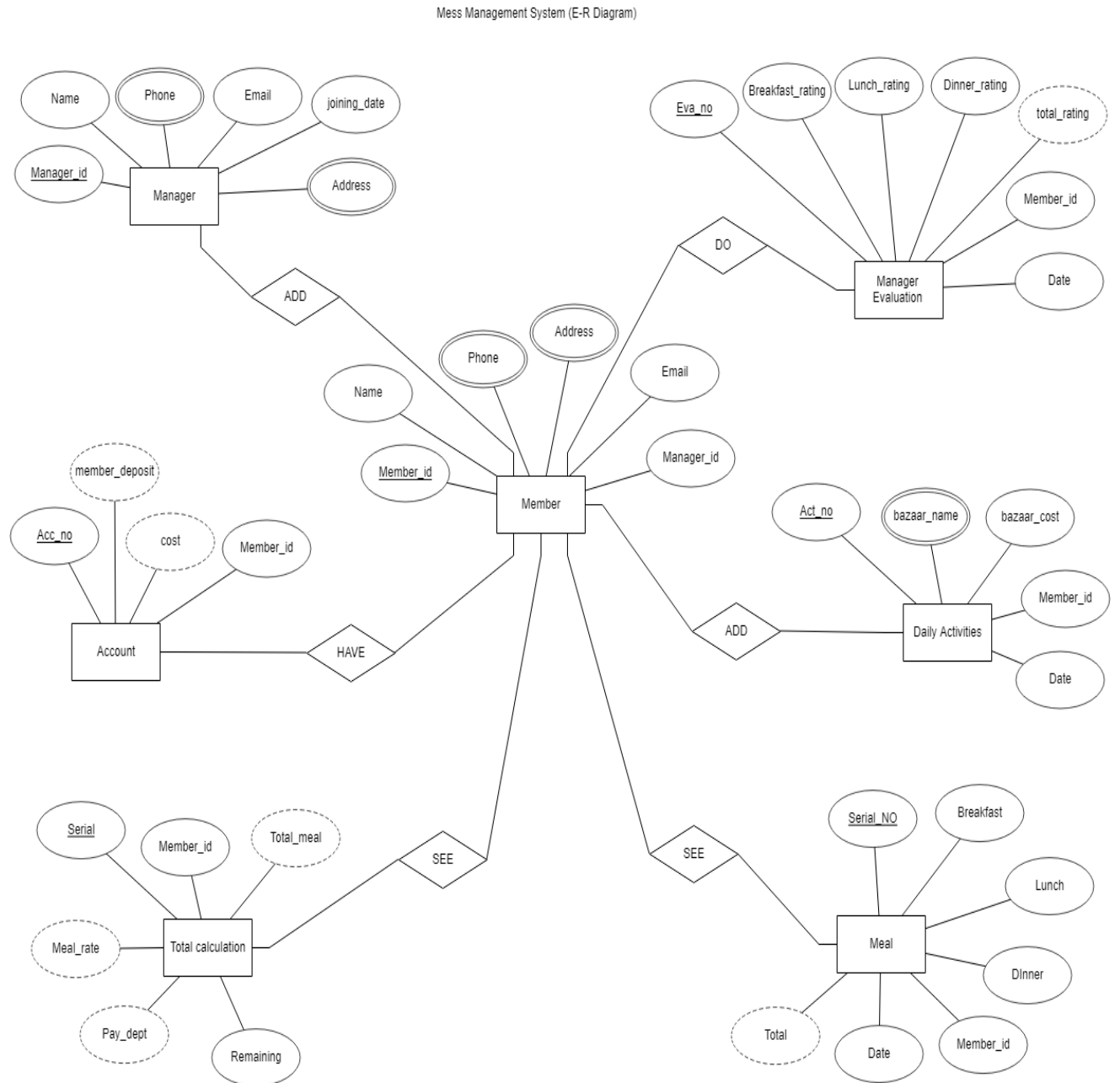
Batch: 45th

Section: 06

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Mess management system

ER-Diagram:



Generally, most of the student passing there are student life live in the mess. To live in the mess, they have to follow some rules and regulation. The most important and biggest rule is, each of every mess member has to take the entire responsibility of the mass in individual month. He has to manage the entire 'Mess management system'. Who manage the entire system we called him 'Manager'. He has to manage lot of things, such as:

1. Add new member.
2. Manage account.
3. Check daily activities
4. Paying attention to meals
5. Total calculation.

A manager has to notice this thing every day. Which is really boring and painful.

So, this is the purpose that we think to create a 'Mess Management System'. Which is make this thinks easier and interesting. In our MMS (Mess Management System) we have added all features to make it easy for a manager. We use 'MySQL' database to store all the data.

Now we will provide some idea of our MMS (Mess management System):-

- A manager can add multiple member in the mess.
- Member add daily activities in the system.
- Member have an account Manager handle the account and total calculation through the member.
- Member see the number of meal to corresponding the date.
- Members can evaluate the manager and manager just only can see the evaluation rate.
- Every member can just only can see the position of account, number of meal and total calculation.

This are the features we have add in our 'Mess management System'.

List of Entity & Attribute:

Creating 'Manager' table:

```
CREATE TABLE Manager (  
    manager_id varchar (20) PRIMARY key,  
    name varchar (50) not null,  
    phone varchar (30) not null,  
    email varchar (50),  
    address varchar (100) not null,  
    joining_date date not null);
```

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.3705 seconds.)

```
CREATE TABLE Manager( manager_id varchar(20) PRIMARY key, name varchar(50)not null, phone varchar(30) not null, email
varchar(50), address varchar(100) not null, joining_date date not null)
```

[\[Edit inline\]](#) [\[Edit \]](#) [\[Create PHP code \]](#)

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	manager_id	varchar(20)	latin1_swedish_ci	No	None			Change Drop More
<input type="checkbox"/>	2	name	varchar(50)	latin1_swedish_ci	No	None			Change Drop More
<input type="checkbox"/>	3	phone	varchar(30)	latin1_swedish_ci	No	None			Change Drop More
<input type="checkbox"/>	4	email	varchar(50)	latin1_swedish_ci	Yes	NULL			Change Drop More
<input type="checkbox"/>	5	address	varchar(100)	latin1_swedish_ci	No	None			Change Drop More
<input type="checkbox"/>	6	joining_date	date		No	None			Change Drop More

Creating 'Member' table:

```
CREATE TABLE member(
    member_id varchar(20) PRIMARY key,
    name varchar(50) not null,
    phone varchar(20) not null,
    email varchar(50) not null,
    address varchar(100)not null,
    manager_id varchar(20) not null,
    FOREIGN key member(manager_id) REFERENCES manager(manager_id)
```

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.2209 seconds.)

```
CREATE TABLE Member( member_id varchar(20) PRIMARY key, name varchar(50) not null, phone varchar(20) not null, email
varchar(50) not null, address varchar(100)not null, manager_id varchar(20) not null, FOREIGN key member(manager_id)
REFERENCES manager(manager_id))
```

[\[Edit inline\]](#) [\[Edit \]](#) [\[Create PHP code \]](#)

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	member_id	varchar(20)	latin1_swedish_ci	No	None			Change Drop More
<input type="checkbox"/>	2	name	varchar(50)	latin1_swedish_ci	No	None			Change Drop More
<input type="checkbox"/>	3	phone	varchar(20)	latin1_swedish_ci	No	None			Change Drop More
<input type="checkbox"/>	4	email	varchar(50)	latin1_swedish_ci	No	None			Change Drop More
<input type="checkbox"/>	5	address	varchar(100)	latin1_swedish_ci	No	None			Change Drop More
<input type="checkbox"/>	6	manager_id	varchar(20)	latin1_swedish_ci	No	None			Change Drop More

Creating 'Manager Evaluation' table:

```
CREATE TABLE manager_evaluation(
    eva_no int(20) PRIMARY key AUTO_INCREMENT,
```

```

member_id varchar(20) not null,
breakfast_rating int(10)not null,
launch_rating int(10)not null,
dinner_rating int(10)not null,
total_ratig int(10) not null,
FOREIGN KEY (member_id) REFERENCES member(member_id)
);

```

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.3064 seconds.)

```

CREATE table Manager_Evaluation( eva_no int(20) PRIMARY key AUTO_INCREMENT, member_id varchar(20) not null, breakfast_rating
int(10)not null, launch_rating int(10)not null, dinner_rating int(10)not null, total_ratig int(10) not null, FOREIGN KEY
(member_id) REFERENCES member(member_id))

```

[\[Edit inline\]](#) [\[Edit \]](#) [\[Create PHP code \]](#)

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	eva_no			No	None		AUTO_INCREMENT	Change Drop More
<input type="checkbox"/>	2	member_id	latin1_swedish_ci		No	None			Change Drop More
<input type="checkbox"/>	3	breakfast_rating			No	None			Change Drop More
<input type="checkbox"/>	4	launch_rating			No	None			Change Drop More
<input type="checkbox"/>	5	dinner_rating			No	None			Change Drop More
<input type="checkbox"/>	6	total_ratig			No	None			Change Drop More

Creating 'Daily Activity' table:

```

CREATE TABLE daily_activity (
    Act_no int(20) PRIMARY key AUTO_INCREMENT,
    bazar_name varchar(50) not null,
    bazar_cost double(10,3) not null,
    member_id varchar(20) not null,
    FOREIGN key (member_id) REFERENCES member(member_id));

```

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.2643 seconds.)

```

CREATE TABLE Daily_activity( act_no int(20) PRIMARY key AUTO_INCREMENT, bazaar_name varchar(50) not null, bazaar_cost
double(10,3) not null, member_id varchar(20) not null, date date, FOREIGN key (member_id) REFERENCES member(member_id))

```

[\[Edit inline\]](#) [\[Edit \]](#) [\[Create PHP code \]](#)

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	act_no			No	None		AUTO_INCREMENT	Change Drop More
<input type="checkbox"/>	2	bazaar_name	latin1_swedish_ci		No	None			Change Drop More
<input type="checkbox"/>	3	bazaar_cost			No	None			Change Drop More
<input type="checkbox"/>	4	member_id	latin1_swedish_ci		No	None			Change Drop More
<input type="checkbox"/>	5	date			Yes	NULL			Change Drop More

Creating 'Meal' table:

```
CREATE TABLE meal(  
    serial_no int(20) PRIMARY key,  
    member_id varchar(20),  
    breakfast int(10),  
    launch int(10),  
    dinner int(10) ,  
    total int(10) not null,  
    date date,  
    FOREIGN key (member_id) REFERENCES member(member_id)  
);
```

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.8550 seconds.)

```
CREATE TABLE Meal( serial_no int(20) PRIMARY key, member_id varchar(20), breakfast int(10), launch int(10), dinner int(10) ,  
total int(10) not null, date date, FOREIGN key (member_id) REFERENCES member(member_id))
```

[\[Edit inline\]](#) [\[Edit \]](#) [\[Create PHP code \]](#)

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	serial_no	int(20)		No	None			Change Drop More
<input type="checkbox"/>	2	member_id	varchar(20) latin1_swedish_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	3	breakfast	int(10)		Yes	NULL			Change Drop More
<input type="checkbox"/>	4	launch	int(10)		Yes	NULL			Change Drop More
<input type="checkbox"/>	5	dinner	int(10)		Yes	NULL			Change Drop More
<input type="checkbox"/>	6	total	int(10)		No	None			Change Drop More
<input type="checkbox"/>	7	date	date		Yes	NULL			Change Drop More

Creating 'Total calculation' table:

```
CREATE TABLE total_calculation(  
    serial int(20) PRIMARY key AUTO_INCREMENT,  
    member_id varchar(20),  
    total_meal int(10) not null,  
    meal_rate double(10,3)not null,  
    pay_dept double(10,3),  
    remaining double(10,3),  
    FOREIGN key (member_id) REFERENCES member(member_id)  
);
```

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 1.2743 seconds.)

```
CREATE table Total_Calculation( serial int(20) PRIMARY key AUTO_INCREMENT, member_id varchar(20), total_meal int(10) not  
null, meal_rate double(10,3)not null, pay_dept double(10,3), remaining double(10,3), FOREIGN key (member_id) REFERENCES  
member(member_id))
```

[\[Edit inline\]](#) [\[Edit \]](#) [\[Create PHP code \]](#)

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	serial	int(20)		No	None		AUTO_INCREMENT	Change Drop More
<input type="checkbox"/>	2	member_id	varchar(20) latin1_swedish_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	3	total_meal	int(10)		No	None			Change Drop More
<input type="checkbox"/>	4	meal_rate	double(10,3)		No	None			Change Drop More
<input type="checkbox"/>	5	pay_debt	double(10,3)		Yes	NULL			Change Drop More
<input type="checkbox"/>	6	remaining	double(10,3)		Yes	NULL			Change Drop More

Creating 'Account' Table:

```
CREATE TABLE account(
    acc_no varchar(20) PRIMARY key,
    cost double(10,3) not null,
    member_deposite double(10,3),
    member_id varchar(20) not null,
    FOREIGN key account(member_id) REFERENCES member(member_id)
);
```

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.2740 seconds.)

```
CREATE TABLE Account( acc_no varchar(20) PRIMARY key, cost double(10,3) not null, member_deposit double(10,3), member_id
varchar(20) not null, FOREIGN key account(member_id) REFERENCES member(member_id))
```

[\[Edit inline\]](#) [\[Edit \]](#) [\[Create PHP code \]](#)

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	acc_no	varchar(20) latin1_swedish_ci		No	None			Change Drop More
<input type="checkbox"/>	2	cost	double(10,3)		No	None			Change Drop More
<input type="checkbox"/>	3	member_deposit	double(10,3)		Yes	NULL			Change Drop More
<input type="checkbox"/>	4	member_id	varchar(20) latin1_swedish_ci		No	None			Change Drop More

Creating 'view':






















Create Member View:

```
CREATE VIEW Member_view
as SELECT m.name, me.total , c.member_deposit
FROM member m, meal me, account c
WHERE m.member_id = me.member_id
AND m.member_id = c.member_id;
```

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0432 seconds.)

```
CREATE VIEW Member_view as SELECT m.name, me.total , c.member_deposit FROM member m, meal me, account c WHERE m.member_id = me.member_id AND m.member_id =
c.member_id
```

[\[Edit inline\]](#) [\[Edit \]](#) [\[Create PHP code \]](#)

<div><div><div></div><div></div><div></div></div></div>				name	total	member_deposit	
<input type="checkbox"/>		Edit	 Copy	 Delete	Arif	3	1100.000
<input type="checkbox"/>		Edit	 Copy	 Delete	Alif	2	13000.000
<input type="checkbox"/>		Edit	 Copy	 Delete	Sajeb	2	1200.000
<input type="checkbox"/>		Edit	 Copy	 Delete	Kabir	4	2800.000
<input type="checkbox"/>		Edit	 Copy	 Delete	Habib	4	900.000
<input type="checkbox"/>		Edit	 Copy	 Delete	Rahman	1	2500.000
<input type="checkbox"/>		Edit	 Copy	 Delete	Jidni	3	1899.000

- **Create Member Info View:**

```
CREATE VIEW MEMBER_INFO
```

```
AS SELECT m.member_id,m.name,me.total,ac.cost,
```

```
ac.member_deposit as Deposit
```

```
FROM account ac,member m,meal me
```

```
WHERE m.member_id=ac.member_id AND m.member_id = me.member_id;
```

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0783 seconds.)

```
CREATE VIEW MEMBER_INFO AS SELECT m.member_id,m.name,me.total,ac.cost,ac.member_deposit as Deposit FROM account ac,member m,meal me WHERE m.member_id=ac.member_id AND m.member_id = me.member_id
```

[\[Edit inline\]](#) [\[Edit \]](#) [\[Create PHP code \]](#)

				member_id	name	total	cost	Deposit
<input type="checkbox"/>				member_01	Arif	3	786.000	1100.000
<input type="checkbox"/>				member_02	Alif	2	927.000	13000.000
<input type="checkbox"/>				member_03	Sajeb	2	1000.000	1200.000
<input type="checkbox"/>				member_04	Kabir	4	1400.000	2800.000
<input type="checkbox"/>				member_05	Habib	4	589.000	900.000
<input type="checkbox"/>				member_06	Rahman	1	2500.000	2500.000
<input type="checkbox"/>				member_08	Jidni	3	1700.000	1899.000

Bazar with all information view:

```
CREATE VIEW BAZAR
```

```
AS SELECT m.member_id,m.name,d.bazaar_name,d.bazaar_cost,d.date
```

```
FROM member m,daily_activity d
```

```
WHERE m.member_id=d.member_id;
```

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0780 seconds.)

```
CREATE VIEW BAZAR AS SELECT m.member_id,m.name,d.bazaar_name,d.bazaar_cost,d.date FROM member m,daily_activity d WHERE m.member_id=d.member_id
```

[\[Edit inline\]](#) [\[Edit \]](#) [\[Create PHP code \]](#)

	member_id	name	bazaar_name	bazaar_cost	date
<input type="checkbox"/> Edit Copy Delete	member_01	Arif	meat,vegetable,fish etc	2000.000	2019-07-01
<input type="checkbox"/> Edit Copy Delete	member_02	Alif	rice,fish,milk etc	600.000	2019-07-01
<input type="checkbox"/> Edit Copy Delete	member_03	Sajeb	rice,etc	400.000	2019-07-03
<input type="checkbox"/> Edit Copy Delete	member_04	Kabir	mosla,meat, etc	800.000	2019-07-04
<input type="checkbox"/> Edit Copy Delete	member_05	Habib	rice,fish	550.000	2019-07-05
<input type="checkbox"/> Edit Copy Delete	member_06	Rahman	only hen	400.000	2019-07-06
<input type="checkbox"/> Edit Copy Delete	member_07	Jilani	fish,meat,milk	900.000	2019-07-06
<input type="checkbox"/> Edit Copy Delete	member_08	Jidni	rice	1300.000	2019-07-08

List of Queries:

1.Alter column:

```
ALTER TABLE manager_evaluation
add COLUMN date date;
```

Show query box

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.6423 seconds.)

```
ALTER TABLE manager_evaluation add COLUMN date date
```

2.Alter table:

```
alter TABLE manager_evaluation
add CONSTRAINT
FOREIGN KEY member_id REFERENCES member(member_id);
```

Show query box

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 1.1152 seconds.)

```
alter TABLE manager_evaluation add CONSTRAINT FOREIGN KEY (member_id) REFERENCES member (member_id)
```

3.Delete:

```
DELETE FROM total_calculation
```

```
WHERE pay_dept = '0';
```

Show query box

✓ 4 rows affected. (Query took 0.1537 seconds.)

```
DELETE FROM total_calculation WHERE pay_dept='0'
```

4.Count of Joining multiTable:

```
SELECT m.manager_id,m.m_name,COUNT(me.member_id)
FROM member me,manager m
WHERE me.manager_id=m.manager_id
GROUP BY manager_id;
```

Show query box

Your SQL query has been executed successfully.

```
SELECT m.manager_id,m.name,COUNT(me.member_id) FROM
```

+ Options

manager_id	name	COUNT(me.member_id)
man_2019	Arif	8

5. Use of As,Like,Order by:

```
SELECT bazaar_name AS name, bazaar_cost AS cost,member_id
FROM daily_activity
WHERE bazaar_name LIKE ('rice%') or bazaar_name LIKE('meat%')
ORDER BY member_id DESC
```

✓ Showing rows 0 - 4 (5 total, Query took 0.0048 seconds.) [member_id: MEMBER_08... - MEMBER_01]

```
SELECT bazaar_name AS name, bazaar_cost AS cost,member_id FROM daily_activity WHERE member_id DESC
```

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key:

+ Options

name	cost	member_id
rice	1300.000	member_08
rice,fish	550.000	member_05
rice,etc	400.000	member_03
rice,fish,milk etc	600.000	member_02
meat,vegetable,fish etc	2000.000	member_01

6.Max finding of multiTable:

```
SELECT m.member_id,max(e.total_ratig) AS Maximum
FROM manager_evaluation e,member m
WHERE m.member_id = e.member_id AND
date BETWEEN '2019-03-03' and '2019-03-08';
```

✓ Showing rows 0 - 0 (1 total, Query took 0.0656 seconds.)

```
SELECT m.member_id,max(e.total_ratig) AS Maximum FROM manager_evaluation e
'2019-03-08'
```

☐ Show all | Number of rows: 25 | Filter rows: Search this table

+ Options

member_id	Maximum
NULL	NULL

7.Joining table:

```
SELECT sum(m.total) AS total_MEAL,sum(d.bazaar_cost) AS Cost,sum(bazaar_cost)/sum(total)
AS Rate
FROM daily_activity d,meal m ,member me
WHERE me.member_id=m.member_id AND
me.member_id=d.member_id;
```

✓ Showing rows 0 - 0 (1 total, Query took 0.0377 seconds.)

```
SELECT sum(m.total) AS total_MEAL, sum(d.bazaar_cost) AS Cost, sum(baza
me.member_id=m.member_id AND me.member_id=d.member_id
```

☐ Show all | Number of rows: 25 ▾ | Filter rows:

+ Options

total_MEAL	Cost	Rate
25	6950.000	278.0000000

8.Joining table:

```
SELECT m.total, a.cost
FROM account a,meal m,member me
WHERE me.member_id=m.member_id AND
me.member_id=a.member_id AND
m.member_id='member_01';
```

✓ Showing rows 0 - 0 (1 total, Query took 0.0390 seconds.)

```
SELECT m.total, a.cost FROM account a,meal m,member me
```

☐ Show all | Number of rows: 25 ▾ | Filter rows:

+ Options

total	cost
3	1200.000

9.Sum:

```
SELECT sum(total) as TOTAL_MEAL
FROM meal;
```

✓ Showing rows 0 - 7 (8 total, Query took 0.0777 seconds.)

```
SELECT sum(total) as TOTAL_MEAL FROM meal
```

☐ Show all | Number of rows: 25 ▾ Filter rows: [

+ Options

TOTAL_MEAL
25

10.Sum:

```
SELECT sum(bazaar_cost) as TOTAL_COST
      FROM daily_activity;
```

✓ Showing rows 0 - 7 (8 total, Query took 0.0024 seconds.)

```
SELECT sum(bazaar_cost) as TOTAL_COST FROM daily_activity
```

☐ Show all | Number of rows: 25 ▾ Filter rows: Search

+ Options

TOTAL_COST
6950.000

11.Update data:

```
UPDATE manager_evaluation
      set date='2019-03-01';
```

Show query box

✓ 6 rows affected. (Query took 0.0852 seconds.)

```
UPDATE manager_evaluation set date='2019-03-01'
```

12.Update data:

```
UPDATE account
```

```
SET cost=524,member_deposite=1000  
WHERE member_id='member_02';
```

Show query box

✓ 0 rows affected. (Query took 0.0048 seconds.)

```
UPDATE account SET cost=90 WHERE member_id=02
```

13.Update data:

```
UPDATE account  
SET cost=786  
WHERE member_id='member_01';
```

Show query box

✓ 1 row affected. (Query took 0.0478 seconds.)

```
UPDATE account SET cost=786 WHERE member_id='member_01'
```

14.Delete whose dept null:

```
DELETE FROM total_calculation  
WHERE pay_dept='0';
```

✓ 0 rows affected. (Query took 0.0031 seconds.)

```
DELETE FROM total_calculation WHERE pay_dept='0'
```

15.Third max rating:

```
SELECT m.manager_id AS Id,m.name AS Name,max(e.total_ratig) as THIRD_MAX
FROM manager_evaluation e,manager m,member me
WHERE e.total_ratig=(SELECT max(total_ratig) FROM
manager_evaluation
WHERE total_ratig<(SELECT max(total_ratig) FROM manager_evaluation
WHERE total_ratig<(SELECT MAX(total_ratig) FROM manager_evaluation)))
AND me.manager_id=m.manager_id AND me.member_id=e.member_id;
```

Showing rows 0 - 0 (1 total, Query took 0.0103 seconds.)

```
SELECT m.manager_id AS Id,m.name AS Name,max(e.total_ratig) as THIRD_MAX FROM manager_evaluation e,manager m,member me WHERE e.total_ratig=(SELECT max(total_ratig) FROM manager_evaluation WHERE total_ratig<(SELECT max(total_ratig) FROM manager_evaluation WHERE total_ratig<(SELECT MAX(total_ratig) FROM manager_evaluation))) AND me.manager_id=m.manager_id AND me.member_id=e.member_id
```

☐ Profiling [\[Edit inline\]](#) [\[Edit\]](#) [\[Explain SQL\]](#) [\[Create PHP code\]](#) [\[Refresh\]](#)

☐ Show all | Number of rows: 25 | Filter rows:

+ Options

	Id	Name	THIRD_MAX
<input type="checkbox"/> Edit Copy Delete	man_2019	Arif	11