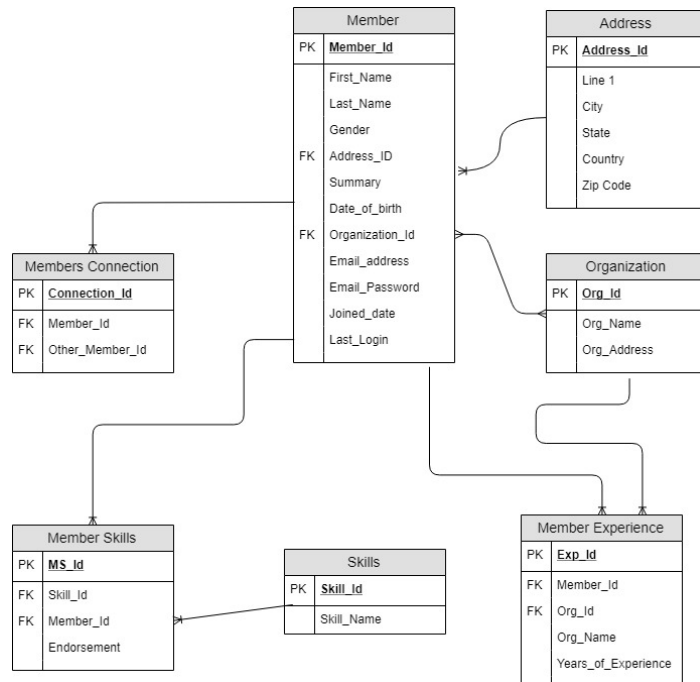


Name: Samruddhi Taware

The database consists of total 7 tables which will mainly contain LinkedIn members' basic information, address, number of connections, organization information, experience and skills.

ER Diagram:

Following diagram illustrate the relationship between tables.



- **Database:**

create database linkedin;

- **Member Table:**

```
CREATE TABLE `Member` (  
  `Member_Id` mediumint unsigned NOT NULL,  
  `FirstName` varchar(255) default NULL,  
  `LastName` varchar(255) default NULL,  
  `Gender` varchar(255) default NULL,  
  `Address_Id` mediumint default NULL,
```

```

`Summary` TEXT default NULL,
`DateOfBirth` varchar(255),
`Org_Id` mediumint default NULL,
`Email_Id` varchar(255) default NULL,
`Email_Password` varchar(255),
`Joined_Date` varchar(255),
`Last_Login` varchar(255),
PRIMARY KEY (`Member_Id`)
);

```

I insert total 100 rows in member table, here's the sample query for only one row insertion.

```

INSERT INTO `Member`
(`Member_Id`,`FirstName`,`LastName`,`Gender`,`Address_Id`,`Summary`,`DateOfBirth`,`Org_Id`,
`Email_Id`,`Email_Password`,`Joined_Date`,`Last_Login`) VALUES
(1,"Hunter","Medina","Male",23,"Phasellus
libero","09/16/1961",21,"pellentesque.a.facilisis@lobortismauris.ca","QLG93MTF5IV","06/18/2
011","2018-09-19 07:00:39");

```

- **Address Table:**

```

CREATE TABLE `Address` (
  `Address_Id` mediumint unsigned NOT NULL auto increment,
  `Address_Line` varchar(255) default NULL,
  `City` varchar(255),
  `State` varchar(50) default NULL,
  `Country` varchar(100) default NULL,
  `ZipCode` varchar(10) default NULL,
  PRIMARY KEY (`Address_id`)
) AUTO INCREMENT=1;

```

Insertion Query:

```
INSERT INTO `Address` (`Address_Id`,`Address_Line`,`City`,`State`,`Country`,`ZipCode`) VALUES (1,"980-8841 Nec Av.,"Reus","CA","Timor-Leste","69425");
```

- **Organization Table:**

```
CREATE TABLE `Organization` (  
  `Org_Id` mediumint unsigned NOT NULL auto_increment,  
  `Org_Name` varchar(255) default NULL,  
  `Description` TEXT default NULL,  
  PRIMARY KEY (`Org_id`)  
) AUTO_INCREMENT=1;
```

Insert Query:

```
INSERT INTO `Organization` (`Org_Id`,`Org_Name`,`Description`) VALUES (1,"Hewlett-Packard","dictum eleifend, nunc risus varius orci, in consequat enim diam");
```

- **Member Experience Table:**

```
CREATE TABLE `Member_Experience` (  
  `Experience_Id` mediumint unsigned NOT NULL auto_increment,  
  `Member_Id` mediumint default NULL,  
  `Org_Id` mediumint default NULL,  
  `Org_Name` varchar(255) default NULL,  
  `NoOfExperience` mediumint default NULL,  
  PRIMARY KEY (`Experience_id`)  
) AUTO_INCREMENT=1;
```

Insert query:

```
INSERT INTO `Member_Experience`  
(`Experience_Id`,`Member_Id`,`Org_Id`,`Org_Name`,`NoOfExperience`) VALUES (1,85,90,"Zara",1);
```

- **Member Skills Table:**

```
CREATE TABLE `User_Skills` (  
  `US_Id` mediumint(8) unsigned NOT NULL auto_increment,  
  `Skill_Id` mediumint default NULL,  
  `Member_Id` mediumint default NULL,  
  `Endorsement` mediumint default NULL,
```

```
PRIMARY KEY (`US_id`)  
) AUTO_INCREMENT=1;
```

Insert Query:

```
INSERT INTO `User_Skills` (`US_Id`,`Skill_Id`,`Member_Id`,`Endorsement`) VALUES (1,6,70,7);
```

- **Skills Table:**

```
CREATE TABLE `Skills` (  
  `Skill_Id` mediumint(8) unsigned NOT NULL auto_increment,  
  `Skill_Name` varchar(255) default NULL,  
  PRIMARY KEY (`Skill_Id`)  
) AUTO_INCREMENT=1;
```

Insert Query:

```
INSERT INTO `Skills` (`Skill_Id`,`Skill_Name`) VALUES (1," PHP");
```

- **Connection Table:**

```
CREATE TABLE `Connections` (  
  `Conn_Id` mediumint (8) unsigned NOT NULL auto_increment,  
  `Member_Id` mediumint default NULL,  
  `Other_Member_Id` mediumint default NULL,  
  PRIMARY KEY (`Conn_Id`)  
) AUTO_INCREMENT=1;
```

Insert Query:

```
INSERT INTO `Connections` (`Conn_Id`,`Member_Id`,`Other_Member_Id`) VALUES  
(1,48,57),(2,6,79),(3,26,75),(4,23,90),(5,13,95),(6,25,83),(7,17,69),(8,38,68),(9,11,66),(10,33,100),  
(11,29,82),(12,5,95),(13,28,83),(14,47,58),(15,21,82),(16,31,90),(17,32,91),(18,21,99),(19,17,56),  
(20,11,51),(21,6,85),(22,5,61),(23,50,93),(24,4,93),(25,5,59),(26,18,83),(27,26,53),(28,49,61),(29,  
,13,64),(30,16,79),(31,50,85),(32,24,96),(33,7,86),(34,4,53),(35,16,68),(36,44,63),(37,9,60),(38,3  
8,97),(39,2,80),(40,22,69),(41,1,76),(42,40,58),(43,10,75),(44,46,89),(45,42,65),(46,50,63),(47,9,  
100),(48,24,62),(49,39,92),(50,2,74),(51,36,71),(52,40,70),(53,8,62),(54,47,71),(55,6,91),(56,30,7  
4),(57,25,78),(58,16,78),(59,37,67),(60,36,88),(61,23,77),(62,30,57),(63,19,92),(64,1,100),(65,42,  
92),(66,6,60),(67,33,92),(68,20,88),(69,48,91),(70,21,93),(71,46,93),(72,1,85),(73,16,91),(74,49,8  
1),(75,35,86),(76,3,76),(77,39,52),(78,45,91),(79,10,89),(80,32,59),(81,35,58),(82,28,52),(83,20,6  
3),(84,27,56),(85,37,96),(86,23,53),(87,5,66),(88,50,54),(89,7,68),(90,10,65),(91,20,89),(92,34,81  
,93,32,79),(94,21,79),(95,40,65),(96,6,62),(97,5,51),(98,10,56),(99,42,51),(100,47,51);
```

Queries:

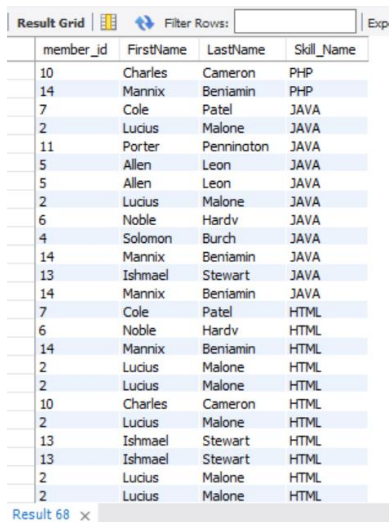
Question 1:

```
select m.member_id, FirstName, LastName, s.Skill_Name from member m
```

```
left join member_skills ms on m.Member_Id = ms.Member_Id
```

```
left join skills s on ms.Skill_Id = s.Skill_Id
```

```
where s.Skill_Name = "PHP" OR s.Skill_Name = "HTML" OR s.Skill_Name = "JAVA" OR s.Skill_Name = "C"  
OR s.Skill_Name = "C++";
```



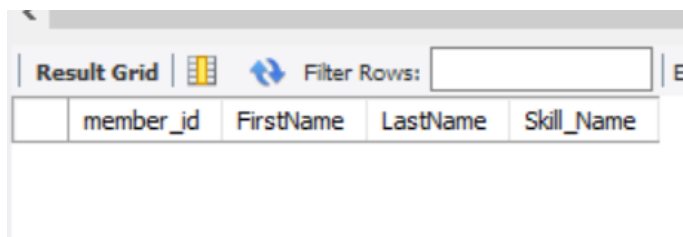
member_id	FirstName	LastName	Skill_Name
10	Charles	Cameron	PHP
14	Mannix	Benjamin	PHP
7	Cole	Patel	JAVA
2	Lucius	Malone	JAVA
11	Porter	Penninton	JAVA
5	Allen	Leon	JAVA
5	Allen	Leon	JAVA
2	Lucius	Malone	JAVA
6	Noble	Hardv	JAVA
4	Solomon	Burch	JAVA
14	Mannix	Benjamin	JAVA
13	Ishmael	Stewart	JAVA
14	Mannix	Benjamin	JAVA
7	Cole	Patel	HTML
6	Noble	Hardv	HTML
14	Mannix	Benjamin	HTML
2	Lucius	Malone	HTML
2	Lucius	Malone	HTML
10	Charles	Cameron	HTML
2	Lucius	Malone	HTML
13	Ishmael	Stewart	HTML
13	Ishmael	Stewart	HTML
2	Lucius	Malone	HTML
2	Lucius	Malone	HTML

```
select m.member_id, FirstName, LastName, s.Skill_Name from member m
```

```
left join member_skills ms on m.Member_Id = ms.Member_Id
```

```
left join skills s on ms.Skill_Id = s.Skill_Id
```

```
where s.Skill_Name = "PHP" and s.Skill_Name = "HTML" and s.Skill_Name = "JAVA" and s.Skill_Name =  
"C" and s.Skill_Name = "C++";
```



member_id	FirstName	LastName	Skill_Name
-----------	-----------	----------	------------

Returning zero rows because my database does not contain any member who listed all skills.

Question 2:

```
select m.member_id, FirstName, LastName, s.Skill_Name, endorsement from member m
join member_skills ms on m.Member_Id = ms.Member_Id
join skills s on ms.Skill_Id = s.Skill_Id
where ms.endorsement > 10;
```



member_id	FirstName	LastName	Skill_Name	endorseme
14	Mannix	Benjamin	Rubv	11
14	Mannix	Benjamin	HTML	11
14	Mannix	Benjamin	SOL	11
2	Lucius	Malone	JAVA	11
2	Lucius	Malone	PHP	11
2	Lucius	Malone	C	11
2	Lucius	Malone	C++	11
2	Lucius	Malone	Rubv	11
2	Lucius	Malone	HTML	11
2	Lucius	Malone	SOL	11
14	Mannix	Benjamin	JAVA	12
14	Mannix	Benjamin	PHP	12
14	Mannix	Benjamin	C	12
14	Mannix	Benjamin	C++	12
14	Mannix	Benjamin	Rubv	12
14	Mannix	Benjamin	HTML	12
14	Mannix	Benjamin	SOL	12
15	Yasir	Sosa	JAVA	12
15	Yasir	Sosa	PHP	12
15	Yasir	Sosa	C	12
15	Yasir	Sosa	C++	12
15	Yasir	Sosa	Rubv	12
15	Yasir	Sosa	HTML	12
15	Yasir	Sosa	SOL	12

Question 3:

```
select m.Member_Id, FirstName, LastName, sum(e.NoOfExperience) as tot_exp from member m
join member_experience e on m.Member_Id = e.Member_Id
group by m.Member_Id
having tot_exp > 10;
```

Result Grid				
Filter Rows:				
Member_Id	FirstName	LastName	tot_exp	
1	Owen	Galleos	31	
3	Erasmus	Haves	20	
8	Xanthus	Shepherd	11	
9	Hamish	Atkinson	18	
13	Ishmael	Stewart	34	
16	Brady	Owen	18	
17	Amir	Frazier	25	
18	Tyler	Buck	21	
22	Hakeem	Clayton	15	
25	Price	O'Neill	39	
27	Elvis	Nicholson	24	
29	Lionel	Knowles	20	
32	Tanner	Tucker	45	
33	Amos	Lawrence	15	
35	Garth	Brennan	31	
37	Tyler	Guv	22	
41	Slade	Cooke	38	
42	Chase	Winters	20	
43	Myles	Morrow	14	
46	Flynn	McClain	16	
48	Steven	Heath	11	
51	Colin	Small	22	
55	Curran	Solomon	14	
56	Chaim	Roach	36	

Question 4:

select Member_Id, count(*) as NumberOfConnections from Connections
group by Member_Id having NumberOfConnections > 15;

Result Grid		
Filter Rows:		
Member_Id	NumberOfConnections	
1	25	
2	18	
3	24	
4	22	
5	24	


Questions 5:

delete from member where member_id in
(select * from (select m.member_id from member m
left join member_experience e on m.Member_Id = e.member_id
where e.member_id is null) as temp);

Action Output				
#	Time	Action	Message	
94	23:59:23	Apply changes to member_skills	Changes applied	
95	23:59:30	delete from member where member_id in (select * from (select m.member_id from ...	34 row(s) affected	

Question 6:

```
select Member_Id, FirstName, LastName, DateOfBirth from member  
where year(DateOfBirth) between '1960' and '2019';
```


Result Grid  Filter Rows: Edit

Member_Id	FirstName	LastName	DateOfBirth
1	Owen	Galleos	2002-04-12
2	Lucius	Malone	1994-11-23
3	Erasmus	Haves	1993-08-25
4	Solomon	Burch	1996-11-08
5	Allen	Leon	1987-08-24
6	Noble	Hardv	1962-07-16
7	Cole	Patel	2008-05-03
8	Xanthus	Shepherd	1987-04-11
9	Hamish	Atkinson	2009-06-02
10	Charles	Cameron	1964-10-25
11	Porter	Pennington	2000-07-29
12	Yardlev	Shields	1992-01-03
13	Ishmael	Stewart	1998-09-22
14	Mannix	Benjamin	1963-05-21
16	Bradv	Owen	2011-09-15
17	Amir	Frazier	2015-09-03

member 73 x

Question 7:

```
select Member_Id, FirstName, LastName, Joined_Date from member  
where Joined_Date >= (curdate() - interval 2 year);
```

Result Grid  Filter Rows: Edit

Member_Id	FirstName	LastName	Joined_Date
5	Allen	Leon	2018-09-21
6	Noble	Hardv	2018-07-05
8	Xanthus	Shepherd	2018-07-18
10	Charles	Cameron	2019-09-21
11	Porter	Penninton	2018-05-21
12	Yardlev	Shields	2019-12-12
13	Ishmael	Stewart	2019-08-10
18	Tvler	Buck	2018-03-13
21	Plato	Reves	2017-12-14
29	Lionel	Knowles	2017-11-04
31	Marshall	Bucklev	2018-08-06
32	Tanner	Tucker	2019-07-09
34	Burke	Sweenev	2019-08-05
38	Oleo	Maddox	2017-11-21
40	Travis	Clav	2019-07-31
43	Mvles	Morrow	2017-12-22

member 74 x

Question 8:

```
select Member_Id, FirstName, LastName, Joined_Date from member  
where Joined_Date between '2019/01/01' and '2019/02/27';
```


Result Grid		Filter Rows:		Ed
	Member_Id	FirstName	LastName	Joined_Date
	62	Kennedv	Miller	2019-02-04
	NULL	NULL	NULL	NULL

Question 9:

select Member_Id, FirstName, LastName, Last_Login from member
where !(Last_Login >= curdate() - interval 15 day);

Result Grid		Filter Rows:		Edit:
	Member_Id	FirstName	LastName	Last_Login
	1	Owen	Galleaos	2018-03-14 09:27:45
	2	Lucius	Malone	2018-10-27 02:59:09
	3	Erasmus	Haves	2018-03-21 04:16:30
	4	Solomon	Burch	2018-03-13 10:30:36
	5	Allen	Leon	2018-12-10 21:25:32
	6	Noble	Hardv	2018-01-04 15:37:32
	7	Cole	Patel	2018-08-16 09:31:55
	8	Xanthus	Shepherd	2018-08-19 00:54:12
	9	Hamish	Atkinson	2018-09-10 22:25:13
	10	Charles	Cameron	2018-12-01 08:35:17
	11	Porter	Penninton	2018-04-21 00:20:54
	12	Yardlev	Shields	2018-04-14 08:11:24
	13	Ishmael	Stewart	2017-10-27 12:37:28
	14	Mannix	Benjamin	2019-01-18 13:20:14
	15	Yasir	Sosa	2017-10-26 06:15:19
	16	Bradv	Owen	2017-05-20 01:31:50

member 76 x