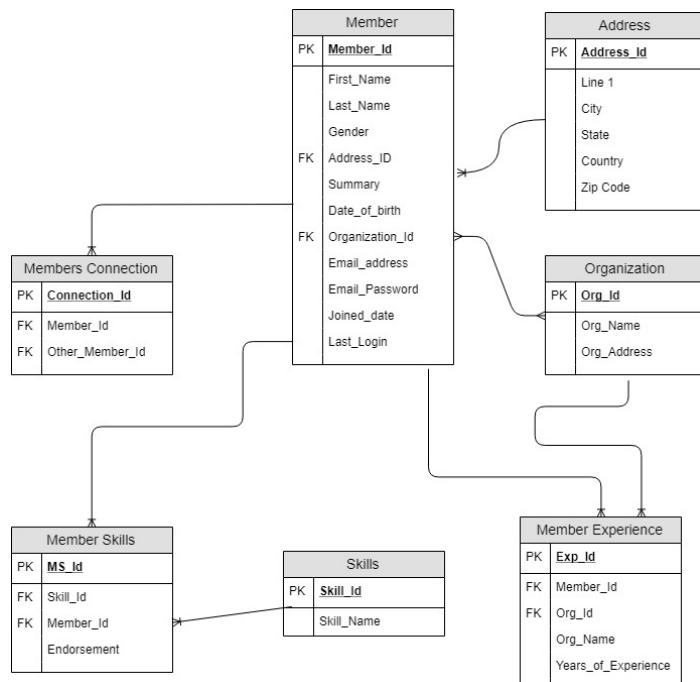


Name: Samruddhi Taware

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++";
```

Result Grid | Filter Rows: Export

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

Result 68 ×

```
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++";
```

Result Grid | Filter Rows: Export

member_id	FirstName	LastName	Skill_Name
10	Charles	Cameron	PHP

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 = ms.Skill_Id  
where ms.endorsement > 10;
```

member_id	FirstName	LastName	Skill_Name	endorseme
14	Mannix	Beniamin	Rubv	11
14	Mannix	Beniamin	HTML	11
14	Mannix	Beniamin	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	Beniamin	JAVA	12
14	Mannix	Beniamin	PHP	12
14	Mannix	Beniamin	C	12
14	Mannix	Beniamin	C++	12
14	Mannix	Beniamin	Rubv	12
14	Mannix	Beniamin	HTML	12
14	Mannix	Beniamin	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

Result 70 ×

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;
```

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	Bradv	Owen	18
17	Ame	Frazier	25
18	Tyler	Buck	21
22	Hakeem	Clavton	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

Result 71 x

Question 4:

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

	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				
	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	Beniamin		1963-05-21
16	Brady	Owen		2011-09-15
17	Amir	Frazier		2015-09-03

Question 7:

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

Result Grid				
	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	Tyler	Buck		2018-03-13
21	Plato	Reves		2017-12-14
29	Lionel	Knowles		2017-11-04
31	Marshall	Buckley		2018-08-06
32	Tanner	Tucker		2019-07-09
34	Burke	Sweeney		2019-08-05
38	Oleg	Maddox		2017-11-21
40	Travis	Clav		2019-07-31
43	Myles	Morrow		2017-12-22

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	Kennedy	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	Galleos	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	Penninaton	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	Beniamin	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