```
select * from Groups, Members where Groups.GID = Members.GID;
```

GID	GName	MID	MName	GID	Contact	Owed	Owe
1000	Harrys Dinner	2000	Harry Potter	1000	harry@hogwarts.jk	113.33	0.00
1000	Harrys Dinner	2002	Hermione Granger	1000	granger@hogwarts.jk	25.00	0.00
1000	Harrys Dinner	2004	Ron Weasley	1000	ron@hogwarts.jk	0.00	138.33
1001	Rons Home	2001	Hermione Granger	1001	granger@hogwarts.jk	33.33	0.00
1001	Rons Home	2003	Harry Potter	1001	harry@hogwarts.jk	0.00	66.67
1001	Rons Home	2005	Ron Weasley	1001	ron@hogwarts.jk	66.67	0.00
1002	Voldemorts Corp	2006	Tom Riddle	1002	tom@hogwarts.jk	0.00	4333.33
1002	Voldemorts Corp	2013	Lucius Malfoy	1002	lucius@hogwarts.jk	8666.66	0.00
1002	Voldemorts Corp	2014	Bellatrix Lestrange	1002	bellatrix@hogwarts.jk	0.00	4333.33
1003	Dobbys Club	2007	Rubeus Hagrid	1003	rubeus@hogwarts.jk	0.00	1600.00
1003	Dobbys Club	2008	Luna Lovegood	1003	luna@hogwarts.jk	1600.00	0.00
1003	Dobbys Club	2009	Dobby	1003	dobby@hogwarts.jk	0.00	0.00
1004	Snapes Firm	2010	Albus Dumbledore	1004	albus@hogwarts.jk	0.00	666.67
1004	Snapes Firm	2011	Severus Snape	1004	severus@hogwarts.jk	0.00	666.67
1004	Snapes Firm	2012	Minerva McGonagall	1004	minerva@hogwarts.jk	1333.34	0.00

```
select Groups.GName, Transactions.Date from Groups, Transactions where Groups.GID =
Transactions.GID;
```

GName	Date
Harrys Dinner	1998-05-02
Harrys Dinner	1998-05-02
Rons Home	1998-01-02
Rons Home	1998-01-09
Snapes Firm	1996-03-05
Dobbys Club	1995-09-21
Voldemorts Corp	1997-12-15
Harrys Dinner	1998-05-06
Rons Home	1998-01-17
Dobbys Club	1995-12-25

```
select Owings.OAmt, Transactions.Date from Owings, Transactions where Owings.TID =
Transactions.TID;

+---------+------------+
| OAmt    | Date       |
+---------+------------+
|   25.00 | 1998-05-02 |
|   25.00 | 1998-05-02 |
|  113.33 | 1998-05-02 |
|  113.33 | 1998-05-02 |
|   66.67 | 1998-01-02 |
|   66.67 | 1998-01-02 |
|   33.33 | 1998-01-09 |
|   33.33 | 1998-01-09 |
|  666.67 | 1996-03-05 |
|  666.67 | 1996-03-05 |
| 1600.00 | 1995-09-21 |
| 1600.00 | 1995-09-21 |
| 4333.33 | 1997-12-15 |
| 4333.33 | 1997-12-15 |
+---------+------------+


select * from Owings, Transactions where Owings.TID = Transactions.TID;

+------+---------+------------+----------+------+------+------+------------+
| OID  | OAmt    | MID_owedto | MID_owes | TID  | TID  | GID  | Date       |
+------+---------+------------+----------+------+------+------+------------+
| 5000 |   25.00 |       2002 |     2000 | 3000 | 3000 | 1000 | 1998-05-02 |
| 5001 |   25.00 |       2002 |     2004 | 3000 | 3000 | 1000 | 1998-05-02 |
| 5002 |  113.33 |       2000 |     2002 | 3001 | 3001 | 1000 | 1998-05-02 |
| 5003 |  113.33 |       2000 |     2004 | 3001 | 3001 | 1000 | 1998-05-02 |
| 5004 |   66.67 |       2005 |     2001 | 3002 | 3002 | 1001 | 1998-01-02 |
| 5005 |   66.67 |       2005 |     2003 | 3002 | 3002 | 1001 | 1998-01-02 |
| 5006 |   33.33 |       2001 |     2003 | 3003 | 3003 | 1001 | 1998-01-09 |
| 5007 |   33.33 |       2001 |     2005 | 3003 | 3003 | 1001 | 1998-01-09 |
| 5008 |  666.67 |       2012 |     2010 | 3004 | 3004 | 1004 | 1996-03-05 |
| 5009 |  666.67 |       2012 |     2011 | 3004 | 3004 | 1004 | 1996-03-05 |
| 5010 | 1600.00 |       2008 |     2007 | 3005 | 3005 | 1003 | 1995-09-21 |
| 5011 | 1600.00 |       2008 |     2009 | 3005 | 3005 | 1003 | 1995-09-21 |
| 5012 | 4333.33 |       2013 |     2006 | 3006 | 3006 | 1002 | 1997-12-15 |
| 5013 | 4333.33 |       2013 |     2014 | 3006 | 3006 | 1002 | 1997-12-15 |
+------+---------+------------+----------+------+------+------+------------+

select a.MName, Owings.OAmt owes, b.MName `to`,
      Groups.GName `in`, Transactions.Date since
      from Members a , Owings, Members b, Groups, Transactions
      where a.MID = Owings.MID_owes and
            b.MID = Owings.MID_owedto and Groups.GID =
            a.GID and Owings.TID = Transactions.TID
      group by Owings.OID
      order by Transactions.Date;

+--------------------+---------+-------------------+----------------
+------------+
| MName              | owes    | to                | in             | since
|
+--------------------+---------+-------------------+----------------
+------------+
```

```
| Rubeus Hagrid      | 1600.00 | Luna Lovegood      | Dobbys Club     | 1995-09-21
|
| Dobby              | 1600.00 | Luna Lovegood      | Dobbys Club     | 1995-09-21
|
| Severus Snape      |  666.67 | Minerva McGonagall | Snapes Firm     | 1996-03-05
|
| Albus Dumbledore   |  666.67 | Minerva McGonagall | Snapes Firm     | 1996-03-05
|
| Bellatrix Lestrange | 4333.33 | Lucius Malfoy      | Voldemorts Corp | 1997-12-15
|
| Tom Riddle         | 4333.33 | Lucius Malfoy      | Voldemorts Corp | 1997-12-15
|
| Hermione Granger   |   66.67 | Ron Weasley        | Rons Home       | 1998-01-02
|
| Harry Potter       |   66.67 | Ron Weasley        | Rons Home       | 1998-01-02
|
| Ron Weasley        |   33.33 | Hermione Granger   | Rons Home       | 1998-01-09
|
| Harry Potter       |   33.33 | Hermione Granger   | Rons Home       | 1998-01-09
|
| Hermione Granger   |  113.33 | Harry Potter       | Harrys Dinner   | 1998-05-02
|
| Ron Weasley        |  113.33 | Harry Potter       | Harrys Dinner   | 1998-05-02
|
| Harry Potter       |   25.00 | Hermione Granger   | Harrys Dinner   | 1998-05-02
|
| Ron Weasley        |   25.00 | Hermione Granger   | Harrys Dinner   | 1998-05-02
|
+---------------------+---------+--------------------+-----------------
+------------+

select Members.MName, Expenses.EAmt paid, Expenses.EName `for`,
      Transactions.Date `on`, Groups.GName `in`
      from Members, Expenses, Transactions, Groups
      where
            Expenses.MID_paidby = Members.MID and
            Expenses.TID = Transactions.TID and
            Transactions.GID = Groups.GID
      group by Expenses.EName
      order by Transactions.Date;

+--------------------+----------+------------+------------+----------------+
| MName              | paid     | for        | on         | in             |
+--------------------+----------+------------+------------+----------------+
| Luna Lovegood      |  4800.00 | Gold       | 1995-09-21 | Dobbys Club    |
| Minerva McGonagall |  2000.00 | Hats       | 1996-03-05 | Snapes Firm    |
| Lucius Malfoy      | 13000.00 | Ministry   | 1997-12-15 | Voldemorts Corp |
| Ron Weasley        |   200.00 | Electricity | 1998-01-02 | Rons Home      |
| Hermione Granger   |   100.00 | Water      | 1998-01-09 | Rons Home      |
| Hermione Granger   |    75.00 | Wine       | 1998-05-02 | Harrys Dinner  |
| Harry Potter       |   340.00 | Food       | 1998-05-02 | Harrys Dinner  |
+--------------------+----------+------------+------------+----------------+

select a.MName, Settled.SAmt settled,
      Transactions.Date `on`, b.MName `with`
      from Members a, Settled, Transactions, Members b
      where
            a.MID = Settled.MID_paidby and
            Settled.TID = Transactions.TID and
```

```
            b.MID = Settled.MID_paidto
      group by Transactions.Date
      order by Transactions.Date;
```

```
+------------------+---------+------------+----------------+
| MName            | settled | on         | with           |
+------------------+---------+------------+----------------+
| Dobby            | 1600.00 | 1995-12-25 | Luna Lovegood  |
| Hermione Granger |   33.34 | 1998-01-17 | Ron Weasley    |
| Hermione Granger |   88.33 | 1998-05-06 | Harry Potter   |
+------------------+---------+------------+----------------+
```

```
//it shows how amuch money are paid by each person
SELECT SAmt, MID_paidby, Members.MName
FROM Settled
INNER JOIN Members ON Settled.MID_paidby = Members.MID
GROUP BY SAmt;
```

```
+---------+------------+------------------+
| SAmt    | MID_paidby | MName            |
+---------+------------+------------------+
|   33.34 |       2001 | Hermione Granger |
|   88.33 |       2002 | Hermione Granger |
| 1600.00 |       2009 | Dobby            |
+---------+------------+------------------+
```

```
//it shows how much money are spent for each person
SELECT EAmt, Members.MName
FROM Expenses, Members Where Expenses.MID_paidby = Members.MID
GROUP BY EAmt;
```

```
+----------+--------------------+
| EAmt     | MName              |
+----------+--------------------+
|    75.00 | Hermione Granger   |
|   100.00 | Hermione Granger   |
|   200.00 | Ron Weasley        |
|   340.00 | Harry Potter       |
|  2000.00 | Minerva McGonagall |
|  4800.00 | Luna Lovegood      |
| 13000.00 | Lucius Malfoy      |
+----------+--------------------+
```

```
// it shows how many times each person owed others
SELECT Owed, MName, COUNT(*)
FROM Members
GROUP BY Owed;
```

```
+---------+--------------------+----------+
| Owed    | MName              | COUNT(*) |
+---------+--------------------+----------+
|    0.00 | Harry Potter       |        8 |
|   25.00 | Hermione Granger   |        1 |
|   33.33 | Hermione Granger   |        1 |
|   66.67 | Ron Weasley        |        1 |
|  113.33 | Harry Potter       |        1 |
| 1333.34 | Minerva McGonagall |        1 |
| 1600.00 | Luna Lovegood      |        1 |
| 8666.66 | Lucius Malfoy      |        1 |
```

```
+---------+-------------------+----------+
```

//Queries for Assignment4
//First and Second queries show the count of how many people owe them/ how many
people the owe to
//Third query shows for every person how many payments they've done

```
SELECT MID_owedto, Members.MName, COUNT(*)
FROM Owings
INNER JOIN Members ON Owings.MID_owedto = Members.MID
GROUP BY MID_owedto;
```

```
+------------+-------------------+----------+
| MID_owedto | MName             | COUNT(*) |
+------------+-------------------+----------+
|       2000 | Harry Potter      |        2 |
|       2001 | Hermione Granger  |        2 |
|       2002 | Hermione Granger  |        2 |
|       2005 | Ron Weasley       |        2 |
|       2008 | Luna Lovegood     |        2 |
|       2012 | Minerva McGonagall|        2 |
|       2013 | Lucius Malfoy     |        2 |
+------------+-------------------+----------+
```

```
SELECT MID_owes, Members.MName, COUNT(*)
FROM Owings
INNER JOIN Members ON Owings.MID_owes = Members.MID
GROUP BY MID_owedto;
```

```
+----------+-------------------+----------+
| MID_owes | MName             | COUNT(*) |
+----------+-------------------+----------+
|     2002 | Hermione Granger  |        2 |
|     2003 | Harry Potter      |        2 |
|     2000 | Harry Potter      |        2 |
|     2001 | Hermione Granger  |        2 |
|     2007 | Rubeus Hagrid     |        2 |
|     2010 | Albus Dumbledore  |        2 |
|     2006 | Tom Riddle        |        2 |
+----------+-------------------+----------+
```

```
SELECT MID_paidby, Members.MName, COUNT(*)
FROM Settled
INNER JOIN Members ON Settled.MID_paidby = Members.MID
GROUP BY MID_paidby;
```

```
+------------+-------------------+----------+
| MID_paidby | MName             | COUNT(*) |
+------------+-------------------+----------+
|       2001 | Hermione Granger  |        1 |
|       2002 | Hermione Granger  |        1 |
|       2009 | Dobby             |        1 |
+------------+-------------------+----------+
```