

```
mysql> create table Actor(act_id integer primary key,act_name varchar(100),act_gender
varchar(10));
```

Query OK, 0 rows affected (0.04 sec)

```
mysql> create table Director(dir_id integer primary key,dir_name varchar(200),dir_phone
varchar(100));
```

Query OK, 0 rows affected (0.04 sec)

```
mysql> create table Movies(mov_id integer primary key,mov_title varchar(255),mov_year
year,mov_lang varchar(100),dir_id int, foreign key (dir_id) references Director(dir_id));
```

Query OK, 0 rows affected (0.02 sec)

```
mysql> create table Movie_cast (act_id int,foreign key (act_id) references Actor(act_id), mov_id int,
foreign key(mov_id) references Movies(mov_id),role varchar(100), primary key(act_id,mov_id) );
```

Query OK, 0 rows affected (0.04 sec)

```
mysql> create table Rating(mov_id integer primary key , foreign key(mov_id) references
Movies(mov_id),rev_stars integer);
```

Query OK, 0 rows affected (0.04 sec)

```
mysql> insert into Actor values(1001, 'Tom Crusie','M'),(1002, 'Chris Hemsworth','M'),(1003,
'Angelina Jolie','F'),(1004, 'Margot Robbie','F'),(1005, 'Kate Winslet','F'),(1006, 'Robert Downey','M');
```

Query OK, 6 rows affected (0.02 sec)

Records: 6 Duplicates: 0 Warnings: 0

```
mysql> insert into Director values (9001, 'Hitchcock',9874562154),(9002, 'Steven
Spielberg',9874560054),(9003, 'Joseph Levitan',9874562178),(9004, 'Christopher
Loyd',9874564454),(9005, 'Yash Chopra',9874562994),(9006, 'Tom Jones',9874503154);
```

Query OK, 6 rows affected (0.02 sec)

Records: 6 Duplicates: 0 Warnings: 0

```
mysql> select * from Director;
```

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

```
| dir_id | dir_name      | dir_phone |
```

```

+-----+-----+-----+
| 9001 | Hitchcock      | 9874562154 |
| 9002 | Steven Spielberg | 9874560054 |
| 9003 | Joseph Levitan   | 9874562178 |
| 9004 | Christopher Loyd  | 9874564454 |
| 9005 | Yash Chopra      | 9874562994 |
| 9006 | Tom Jones        | 9874503154 |

```

```

+-----+-----+-----+
6 rows in set (0.00 sec)

```

mysql> insert into Movies values

```

-> (101,'Iron
Man',2014,'English',9001),(102,'Prosperity',2001,'Spanish',9001),(103,'Spiderman',1998,'English',900
2),(104,'Star Wars',1999,'English',9003),(105,'Thor',2017,'English',9002),(106,'Captain
America',1994,'English',9004);

```

Query OK, 6 rows affected (0.02 sec)

Records: 6 Duplicates: 0 Warnings: 0

mysql> select \* from Movies;

```

+-----+-----+-----+-----+-----+
| mov_id | mov_title      | mov_year | mov_lang | dir_id |
+-----+-----+-----+-----+-----+
| 101 | Iron Man       | 2014 | English | 9001 |
| 102 | Prosperity     | 2001 | Spanish | 9001 |
| 103 | Spiderman      | 1998 | English | 9002 |
| 104 | Star Wars      | 1999 | English | 9003 |
| 105 | Thor           | 2017 | English | 9002 |
| 106 | Captain America | 1994 | English | 9004 |
+-----+-----+-----+-----+-----+

```

6 rows in set (0.00 sec)

```
mysql> insert into Movie_cast values
(1001,101,'Joey'),(1001,102,'Conor'),(1002,102,'Tim'),(1003,103,'Kate'),(1004,104,'Claire'),(1006,105,
'Sally'),(1005,106,'Jo');
```

Query OK, 7 rows affected (0.02 sec)

Records: 7 Duplicates: 0 Warnings: 0

```
mysql> insert into Movie_cast values(1002,106,'Craft'),(1002,104,'Josh'),(1005,105,'Roy');
```

Query OK, 3 rows affected (0.02 sec)

Records: 3 Duplicates: 0 Warnings: 0

```
mysql> select * from Movie_cast;
```

```
+-----+-----+-----+
| act_id | mov_id | role |
+-----+-----+-----+
| 1001 | 101 | Joey |
| 1001 | 102 | Conor |
| 1002 | 102 | Tim |
| 1002 | 104 | Josh |
| 1002 | 106 | Craft |
| 1003 | 103 | Kate |
| 1004 | 104 | Claire |
| 1005 | 105 | Roy |
| 1005 | 106 | Jo |
| 1006 | 105 | Sally |
+-----+-----+-----+
```

10 rows in set (0.00 sec)

```
mysql> insert into Rating values(101,4),(102,3),(103,5),(104,2),(105,4),(106,3);
```

Query OK, 6 rows affected (0.02 sec)

Records: 6 Duplicates: 0 Warnings: 0

```
mysql> select * from Rating;
```

mov_id	rev_stars
101	4
102	3
103	5
104	2
105	4
106	3

6 rows in set (0.00 sec)

```
mysql> select mov_title from Movies where dir_id in (select dir_id from Director where
dir_name='Hitchcock');
```

mov_title
Iron Man
Prosperity

2 rows in set (0.00 sec)

```
mysql> select distinct m.mov_title,c.act_id from Movies m, Movie_cast c where m.mov_id=c.mov_id
and c.act_id in (select act_id from Movie_cast group by act_id having count(mov_id)>1);
```

mov_title	act_id
Iron Man	1001
Prosperity	1001
Prosperity	1002
Star Wars	1002
Thor	1005

Captain America	1002
-----------------	------

Captain America	1005
-----------------	------

+-----+	+-----+
---------	---------

7 rows in set (0.00 sec)

```
mysql> select act_name from Actor where act_id in(select a.act_id from (select act_id from
Movie_cast natural join Movies where mov_year<2000)a inner join (select act_id from Movie_cast
natural join Movies where mov_year>2015)b on a.act_id=b.act_id);
```

+-----+
---------

act_name
----------

+-----+
---------

Kate Winslet
--------------

+-----+
---------

1 row in set (0.00 sec)

```
mysql> select mov_title,max(rev_stars) from Movies m,Rating r where m.mov_id=r.mov_id group by
m.mov_title having count(r.rev_stars)>0;
```

+-----+	+-----+
---------	---------

mov_title	max(rev_stars)
-----------	----------------

+-----+	+-----+
---------	---------

Iron Man	4
----------	---

Prosperity	3
------------	---

Spiderman	5
-----------	---

Star Wars	2
-----------	---

Thor	4
------	---

Captain America	3
-----------------	---

+-----+	+-----+
---------	---------

6 rows in set (0.00 sec)

```
mysql> update Rating set rev_stars=5 where mov_id in (select mov_id from Movies inner join
Director on Movies.dir_id=Director.dir_id and Director.dir_name='Steven Spielberg');
```

Query OK, 1 row affected (0.00 sec)

Rows matched: 2 Changed: 1 Warnings: 0

```
mysql> select * from Rating;
```

mov_id	rev_stars
101	4
102	3
103	5
104	2
105	5
106	3

6 rows in set (0.00 sec)

```
mysql>
```