LAB2 ANSWERS

```
mysql> create database E16267Lab02;
Query OK, 1 row affected (0.23 sec)
mysql> use E16267Lab02;
Database changed
```

```
mysql> CREATE TABLE MOVIE
-> (MOVIE_ID INT PRIMARY KEY,
-> Title VARCHAR(25),
-> Year YEAR,
-> Directer VARCHAR(25));
Query OK, 0 rows affected (2.67 sec)
```

```
mysql> CREATE TABLE REVIEWER
-> (Reviewer_ID INT PRIMARY KEY,Reviewer_Name VARCHAR(25));
Query OK, 0 rows affected (1.45 sec)
```

```
mysql> Describe REVIEWER;
               Type
                            | Null | Key | Default | Extra
 Reviewer_ID
               int
                             NO
                                    PRI NULL
 Reviewer_Name | varchar(25) | YES |
                                          NULL
 rows in set (0.00 sec)
mysql> Insert into MOVIE
   -> Values(101, 'Gone with the Wind', '1939', 'Victor Fleming');
Query OK, 1 row affected (0.30 sec)
mysql> Insert into MOVIE
   -> Values(102, 'Star Wars', 1977, 'George Lucas'),
   -> (103, 'The Sound of Music', 1965, 'Robert Wise'),
   -> (104, 'E.T.', 1982, 'Steven Spielberg'),
   -> (105, 'Titanic', 1997, 'James Cameron'),
   -> (106, 'Snow White', 1937, NULL),
   -> (107, 'Avatar', 2009, 'James Cameron'),
   -> (108, 'Raiders of the Lost Ark', 1981, 'Steven Spielberg');
Query OK, 7 rows affected (0.32 sec)
Records: 7 Duplicates: 0 Warnings: 0
mysql> Select* from MOVIE;
 Movie_ID | Title
                                    | Year | Directer
      101 | Gone with the Wind
                                    | 1939 | Victor Fleming
      102 | Star Wars
                                    | 1977 | George Lucas
                                    1965
      103 | The Sound of Music
                                            Robert Wise
      104 | E.T.
                                    1982
                                            Steven Spielberg
      105 | Titanic
                                    1997
                                            James Cameron
      106 | Snow White
                                    1937
                                            NULL
      107 | Avatar
                                    2009 | James Cameron
      108 | Raiders of the Lost Ark | 1981 | Steven Spielberg
8 rows in set (0.00 sec)
```

```
mysql> Insert into REVIEWER
-> Values(201,'Sarah Martinez'),
-> (202,'Daniel Lewis'),
-> (203,'Brittany Harries'),
-> (204,'Mike Anderson'),
-> (205,'Chris Jackson'),
-> (206,'Elizabeth Thomas'),
-> (207,'James Cameron'),
-> (208,'Ashley White');
Query OK, 8 rows affected (0.30 sec)
Records: 8 Duplicates: 0 Warnings: 0
```

```
mysql> Select* from REVIEWER;
 Reviewer_ID | Reviewer_Name
          201
                Sarah Martinez
                Daniel Lewis
          202
          203
                Brittany Harries
          204
                Mike Anderson
          205
                Chris Jackson
          206
                Elizabeth Thomas
          207
                James Cameron
          208
              Ashley White
8 rows in set (0.00 sec)
```

```
mysql> create table RATING
   -> (Reviewer_ID INT(3) NOT NULL,
   -> Movie_ID INT(3) NOT NULL,
   -> stars INT,
   -> Rating_Date DATE,
   -> FOREIGN KEY (Reviewer_ID) REFERENCES REVIEWER(Reviewer_ID),
   -> FOREIGN KEY (Movie_ID) REFERENCES MOVIE(Movie_ID)
   -> ON DELETE CASCADE ON UPDATE CASCADE);
Query OK, 0 rows affected, 2 warnings (0.88 sec)
```

```
mysql> DESCRIBE RATING;
              | Type | Null | Key | Default | Extra
 Field
 Reviewer_ID | int
                      NO
                             MUL
                                   NULL
 Movie_ID
               int
                      NO
                             MUL
                                   NULL
                      YES
 stars
               int
                                   NULL
 Rating_Date | date | YES
                                   NULL
4 rows in set (0.00 sec)
```

```
mysql> INSERT INTO RATING
   -> VALUES(201,101,2,'2011-01-22');
Query OK, 1 row affected (0.10 sec)
mysql> INSERT INTO RATING
    -> VALUES(201,101,4,'2011-01-27'),
    -> (202,106,4,NULL),
    -> (203,103,2,'2011-01-20'),
    -> (203,108,4,'2011-01-12'),
    -> (203,108,2,'2011-01-30'),
    -> (204,101,3,'2011-01-09'),
   -> (205,103,3,'2011-01-27'),
-> (205,104,2,'2011=01-22'),
    -> (205,108,4,NULL),
    -> (206,107,3,'2011-01-15'),
    -> (206,106,5,'2011-01-19'),
    -> (207,107,5,'2011-01-20'),
    -> (208,104,3,'2011-01-02');
Query OK, 13 rows affected (0.56 sec)
Records: 13 Duplicates: 0 Warnings: 0
```

			
Reviewer_ID	Movie_ID	stars	Rating_Date
201	101	2	2011-01-22
201	101	4	2011-01-27
202	106	4	NULL
203	103	2	2011-01-20
203	108	4	2011-01-12
203	108	2	2011-01-30
204	101	3	2011-01-09
205	103	3	2011-01-27
205	104	2	2011-01-22
205	108	4	NULL
206	107	3	2011-01-15
206	106	5	2011-01-19
207	107	5	2011-01-20
208	104	3	2011-01-02

ANSWERS

1)

```
mysql> SELECT* FROM MOVIE;
 Movie_ID | Title
                                       | Year | Directer
                                       | 1939 | Victor Fleming
| 1977 | George Lucas
| 1965 | Robert Wise
       101 | Gone with the Wind
       102 | Star Wars
       103 | The Sound of Music
       104 | E.T.
                                       1982
                                                Steven Spielberg
       105 | Titanic
                                       | 1997 | James Cameron
                                       | 1937 | NULL
       106 | Snow White
                                       | 2009 | James Cameron
       107 | Avatar
       108 | Raiders of the Lost Ark | 1981 | Steven Spielberg
8 rows in set (0.00 sec)
```

2)

```
mysql> SELECT* FROM MOVIE
    -> WHERE Directer='James Cameron';
+-----+
| Movie_ID | Title | Year | Directer |
+-----+
| 105 | Titanic | 1997 | James Cameron |
| 107 | Avatar | 2009 | James Cameron |
+-----+
2 rows in set (0.00 sec)
```

```
mysql> SELECT* FROM MOVIE
    -> WHERE Directer='James Cameron' AND year>=2000;

+-----+
    | Movie_ID | Title | Year | Directer |

+-----+
    | 107 | Avatar | 2009 | James Cameron |

+-----+
1 row in set (0.00 sec)
```

```
mysql> SELECT stars FROM RATING;

+-----+
| stars |
+-----+
| 2 |
| 4 |
| 4 |
| 2 |
| 4 |
| 2 |
| 3 |
| 3 |
| 3 |
| 5 |
| 5 |
| 5 |
| 1 3 |
+----+

14 rows in set (0.00 sec)
```

```
mysql> SELECT DISTINCT Stars
-> FROM RATING;
+----+
| Stars |
+----+
| 2 |
| 4 |
| 3 |
| 5 |
+----+
4 rows in set (0.00 sec)
```

```
mysql> SELECT Movie_ID,Directer FROM MOVIE;
 Movie_ID | Directer
      101 | Victor Fleming
      102 | George Lucas
            Robert Wise
      103
      104
            Steven Spielberg
      105
            James Cameron
      106
            NULL
      107
            James Cameron
       108 | Steven Spielberg |
8 rows in set (0.00 sec)
mysql>
```

7)

```
mysql> SELECT* FROM Movie
   -> cross join Rating
   -> where Movie_Movie_ID=Rating.Movie_ID;
     Movie_ID | Title | Year | Directer
                                                                                                                                                                                                                       | Reviewer_ID | Movie_ID | stars | Rating_Date |
                                                                                                                                                                                                                                                                                                                               2 | 2011-01-22
4 | 2011-01-27
4 | NULL
2 | 2011-01-20
4 | 2011-01-13
3 | 2011-01-03
3 | 2011-01-07
2 | 2011-01-22
4 | NULL
3 | 2011-01-15
5 | 2011-01-19
5 | 2011-01-20
3 | 2011-01-20
                       101 | Gone with the Wind

101 | Gone with the Wind

106 | Snow White

103 | The Sound of Music

108 | Raiders of the Lost Ark

108 | Raiders of the Lost Ark

101 | Gone with the Wind

103 | The Sound of Music

104 | E.T.

108 | Raiders of the Lost Ark

109 | Avatar
                                                                                                                             1939 | Victor Fleming
1939 | Victor Fleming
1937 | NULL
1965 | Robert Wise
1981 | Steven Spielberg
1981 | Steven Spielberg
1939 | Victor Fleming
1965 | Robert Wise
1982 | Steven Spielberg
1981 | Steven Spielberg
1981 | Steven Spielberg
                                                                                                                                                                                                                                                           201
201
                                                                                                                                                                                                                                                                                               106
103
108
108
101
103
104
108
107
106
107
                                                                                                                                                                                                                                                          203
203
204
                                                                                                                                                                                                                                                           205
205
205
205
                        107
106
                                          Avatar
Snow White
                                                                                                                                     2009
1937
                                                                                                                                                            James Cameron
NULL
                                                                                                                                                                                                                                                           206
206
                                                                                                                                     2009 | James Cameron
1982 | Steven Spielberg
                                          Avatar
E.T.
                        107
104
```

8)optional

mysql> SELECT Movie.Movie_ID,Movie.title,Movie.Year,Movie.Directer,Rating.reviewer_ID,Rating.stars,Rating.Rating_Date -> from Movie -> cross join Rating -> where Movie.Movie_ID=Rating.Movie_ID; | Year | Directer | reviewer_ID | stars | Rating_Date | Movie_ID | title Gone with the Wind 1939 Victor Fleming Gone with the Wind 1939 Victor Fleming 2011-01-27 Snow White The Sound of Music 1965 Robert Wise 2011-01-20 103 Raiders of the Lost Ark 1981 Steven Spielberg 2011-01-12 Raiders of the Lost Ark 1981 Steven Spielberg 2011-01-30 Gone with the Wind Victor Fleming 204 2011-01-09 103 The Sound of Music Robert Wise 205 2011-01-27 104 1982 Steven Spielberg 205 2011-01-22 108 Raiders of the Lost Ark 1981 Steven Spielberg 205 2009 James Cameron 206 2011-01-15 106 Snow White NULL 206 2011-01-19 107 Avatar 2009 James Cameron 207 2011-01-20 104 | E.T. Steven Spielberg 208 2011-01-02 14 rows in set (0.00 sec)

```
mysql> SELECT Movie.Movie ID,Movie.title,Rating.reviewer ID,Rating.stars
    -> from Movie
    -> cross join Rating
    -> where Movie.Movie_ID=Rating.Movie_ID;
 Movie_ID | title
                                      reviewer_ID stars
       101
             Gone with the Wind
                                                201
                                                           2
       101
             Gone with the Wind
                                                201
                                                           4
             Snow White
       106
                                                202
                                                           4
             The Sound of Music
                                                           2
       103
                                                203
       108
             Raiders of the Lost Ark
                                                203
                                                           4
             Raiders of the Lost Ark
                                                           2
       108
                                                203
       101
             Gone with the Wind
                                                204
                                                205
       103
             The Sound of Music
                                                           2
       104
             E.T.
                                                205
       108
             Raiders of the Lost Ark
                                                205
                                                           4
                                                           3
       107
             Avatar
                                                206
       106
             Snow White
                                                206
                                                           5
       107
             Avatar
                                                207
       104
             E.T.
                                                208
                                                           3
14 rows in set (0.00 sec)
```

```
mysql> SELECT Movie.Movie_ID,Movie.Title,Rating.Reviewer_ID,Rating.Stars
    -> from Movie, rating
    -> where Movie.Movie_ID=Rating.Movie_ID;
 Movie_ID | Title
                                     | Reviewer_ID | Stars |
      101 | Gone with the Wind
                                                         2
      101 | Gone with the Wind
                                              201
                                                        4
            Snow White
                                              202
      106
                                                        4
            The Sound of Music
                                                         2
      103
                                              203
            Raiders of the Lost Ark
      108
                                                         4
      108
            Raiders of the Lost Ark
                                              203
                                                         2
            Gone with the Wind
                                              204
      101
      103
            The Sound of Music
                                              205
                                              205
                                                         2
      104
            E.T.
      108
            Raiders of the Lost Ark
                                              205
                                                        4
      107
            Avatar
                                               206
      106
            Snow White
                                               206
      107
            Avatar
                                               207
      104 | E.T.
                                               208
                                                         3 l
14 rows in set (0.00 sec)
mysq1>
```

```
mysql> SELECT Movie.Movie_ID,Movie.Title,Rating.Reviewer_ID,Rating.Stars
   -> from Movie, rating
   -> where Movie.Movie_ID=Rating.Movie_ID and Stars<=3;
 Movie_ID | Title
                                     Reviewer_ID | Stars |
      101 | Gone with the Wind
                                                         2
      103
            The Sound of Music
                                              203
                                                         2
      108
            Raiders of the Lost Ark
                                              203
                                                         2
      101
            Gone with the Wind
                                              204
      103 | The Sound of Music
                                               205
      104 | E.T.
                                              205
                                                         2
      107 | Avatar
                                               206
      104 | E.T.
                                               208
 rows in set (0.00 sec)
mysql>
```

```
mysql> SELECT Movie.Movie_ID,Movie.Title,Rating.Reviewer_ID,Rating.Stars
   -> from Movie, rating
   -> where Movie.Movie_ID=Rating.Movie_ID and Stars>=2 and Stars<=4;
 -----
 Movie_ID | Title | Reviewer_ID | Stars |
      101 | Gone with the Wind
                                                   2
                                         201
      101 | Gone with the Wind
                                         201
                                                   4
           Snow White
                                         202
                                                  4
      106
           The Sound of Music
      103
                                         203
                                                   2
           Raiders of the Lost Ark
      108
                                         203
                                                  4
      108
           Raiders of the Lost Ark
                                         203
                                                   2
                                         204
      101
           Gone with the Wind
      103 | The Sound of Music
                                         205
      104 | E.T.
                                         205
                                                   2
      108 | Raiders of the Lost Ark
                                         205
                                                  4
      107
         Avatar
                                          206
      104 | E.T.
                                          208
12 rows in set (0.00 sec)
mysql>
```

```
mysql> SELECT Rating.Reviewer_ID,Rating.Movie_ID,Reviewer.Reviewer_Name
   -> from Rating, Reviewer
   -> where Rating.Reviewer_ID=Reviewer.Reviewer_ID;
 Reviewer_ID | Movie_ID | Reviewer_Name
         201
                101 | Sarah Martinez
         201
                  101
                         Sarah Martinez
         202
                   106
                         Daniel Lewis
                   103
         203
                         Brittany Harries
                   108
         203
                         Brittany Harries
         203
                   108
                         Brittany Harries
                   101
                         Mike Anderson
         204
                   103
                         Chris Jackson
         205 l
                         Chris Jackson
         205 l
                   104
         205 l
                   108
                         Chris Jackson
         206
                   107
                         Elizabeth Thomas
         206
                   106
                         Elizabeth Thomas
                    107
                         James Cameron
         207
                   104 | Ashley White
         208
14 rows in set (0.00 sec)
mysql>
```

```
mysql> select distinct Rating.Reviewer_ID,Rating.Movie_ID,Reviewer.Reviewer_Name
    -> From rating, Reviewer
    -> where Rating.Reviewer_ID=Reviewer.Reviewer_ID;
 Reviewer_ID | Movie_ID | Reviewer_Name
                     101
                           Sarah Martinez
          201
                           Daniel Lewis
          202
                     106
                            Brittany Harries
          203
                     103
          203
                     108
                            Brittany Harries
          204
                     101
                           Mike Anderson
          205
                     103
                           Chris Jackson
          205
                     104
                           Chris Jackson
          205
                     108
                           Chris Jackson
          206
                     107
                           Elizabeth Thomas
          206
                     106
                           Elizabeth Thomas
          207
                     107
                           James Cameron
          208
                     104 | Ashley White
12 rows in set (0.00 sec)
```

```
mysql> SELECT Movie.Movie_ID,Movie.Title,Reviewer.Reviewer_ID,Reviewer.reviewer_Name,Rating.Stars
    -> from Movie, Reviewer, Rating
   -> where Movie.Movie_ID=Rating.Movie_ID AND Reviewer.Reviewer_ID=Rating.Reviewer_ID;
 Movie_ID | Title
                                      | Reviewer_ID | reviewer_Name
                                                                        | Stars |
             Gone with the Wind
                                                      Sarah Martinez
       101
                                                201
       101
             Gone with the Wind
                                                      Sarah Martinez
                                                201
       106
             Snow White
                                                      Daniel Lewis
             The Sound of Music
                                                203
                                                      Brittany Harries
             Raiders of the Lost Ark
                                                      Brittany Harries
       108
                                                203
       108
             Raiders of the Lost Ark
                                                      Brittany Harries
       101
             Gone with the Wind
                                                204
                                                      Mike Anderson
             The Sound of Music
       103
                                                205
                                                      Chris Jackson
       104
                                                205
                                                      Chris Jackson
             E.T.
             Raiders of the Lost Ark
       108
                                                205
                                                      Chris Jackson
             Avatar
                                                206
                                                      Elizabeth Thomas
       106
             Snow White
                                                206
                                                      Elizabeth Thomas
       107
             Avatar
                                                207
                                                      James Cameron
                                                                              5
       104 | E.T.
                                                208
                                                      Ashley White
14 rows in set (0.00 sec)
nysql>
```

```
mysql> SELECT Directer FROM MOVIE
   -> Where Directer is not NULL
   -> UNION
   -> SELECT REVIEWER_NAME FROM REVIEWER;
 Directer
 Victor Fleming
 George Lucas
 Robert Wise
 Steven Spielberg
 James Cameron
 Sarah Martinez
 Daniel Lewis
 Brittany Harries
 Mike Anderson
 Chris Jackson
 Elizabeth Thomas
 Ashley White
12 rows in set (0.00 sec)
mysql>
```

```
mysql> select*
-> from reviewer
-> WHERE Reviewer_Name LIKE '%Martinez%';
+-----+
| Reviewer_ID | Reviewer_Name |
+-----+
| 201 | Sarah Martinez |
+-----+
1 row in set (0.12 sec)
```

```
mysql> select*
-> from rating
-> Where SUBSTR(Rating_date,9,10)<10;
+-----+
| Reviewer_ID | Movie_ID | stars | Rating_Date |
+-----+
| 204 | 101 | 3 | 2011-01-09 |
| 208 | 104 | 3 | 2011-01-02 |
+-----+
2 rows in set (0.00 sec)
```

```
mysql> select*
    -> from rating
    -> WHERE DAY(Rating_Date)<10;

+-----+
    Reviewer_ID | Movie_ID | stars | Rating_Date |

+-----+
    204 | 101 | 3 | 2011-01-09 |
    208 | 104 | 3 | 2011-01-02 |

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

mysql>
```

```
mysql> UPDATE Rating
    -> inner join Reviewer on Reviewer.Reviewer_ID=Rating.Reviewer_ID
    -> SET Stars=Stars+1
    -> where reviewer.reviewer_Name='Brittany Harries';
Query OK, 3 rows affected (0.24 sec)
Rows matched: 3 Changed: 3 Warnings: 0
mysql> select* from rating
 Reviewer_ID | Movie_ID | stars | Rating_Date
          201
                     101
                                   2011-01-22
          201
                     101
                               4
                                   2011-01-27
          202
                     106
                               4
                                  NULL
          203
                     103
                                 2011-01-20
          203
                     108
                                 2011-01-12
          203
                     108
                                 2011-01-30
          204
                     101
                                 2011-01-09
          205
                     103
                                 2011-01-27
          205
                               2
                                 2011-01-22
                     104
          205
                     108
                               4
                                  NULL
          206
                     107
                                   2011-01-15
          206
                     106
                                   2011-01-19
          207
                     107
                                   2011-01-20
          208
                     104
                               3 2011-01-02
14 rows in set (0.00 sec)
```

```
mysql> select movie.Title,Reviewer.Reviewer_Name,Rating.Stars
   -> from Movie, Reviewer, Rating
   -> where Movie.Movie ID=Rating.Movie ID and Reviewer.Reviewer ID=Rating.Reviewer ID
   -> ORDER BY Title;
 Title
                          Reviewer_Name
                                             Stars
 Avatar
                           Elizabeth Thomas
 Avatar
                           James Cameron
 E.T.
                           Chris Jackson
                           Ashley White
 E.T.
 Gone with the Wind
                           Sarah Martinez
 Gone with the Wind
                           Sarah Martinez
 Gone with the Wind
                           Mike Anderson
 Raiders of the Lost Ark
                           Brittany Harries
 Raiders of the Lost Ark
                           Brittany Harries
 Raiders of the Lost Ark
                           Chris Jackson
 Snow White
                           Daniel Lewis
 Snow White
                           Elizabeth Thomas
 The Sound of Music
                           Brittany Harries
 The Sound of Music
                          Chris Jackson
14 rows in set (0.00 sec)
nysql>
```

```
mysql> Select Movie.Title,Rating.Stars,Rating.Rating_Date
    -> From Movie, Rating
    -> where Movie_ID=Rating.Movie_ID
    -> Order by Rating_Date DESC;
 Title | Stars | Rating_Date |
 -----
 Raiders of the Lost Ark | 3 | 2011-01-30

Gone with the Wind | 4 | 2011-01-27

The Sound of Music | 3 | 2011-01-27

Gone with the Wind | 2 | 2011-01-22
 E.T.
                                2 | 2011-01-22
 The Sound of Music
                                 3 | 2011-01-20
                                5 | 2011-01-20
 Avatar
                                 5 | 2011-01-19
 Snow White
                                  3 | 2011-01-15
 Avatar
                              5 | 2011-01-12
3 | 2011-01-09
3 | 2011-01-02
 Raiders of the Lost Ark
 Gone with the Wind
 E.T.
                                 4 NULL
 Snow White
 Raiders of the Lost Ark | 4 | NULL
14 rows in set (0.00 sec)
```