DATABASE CREATION –

mysql> create database ProblemSet05;
Database created

mysql> use ProblemSet05;
Database changed

TABLE CREATION –

mysql> create table musician (m_no integer,m_name varchar(30),born
date,died date,born_in integer,living_in integer);
Query OK, 0 rows affected (0.03 sec)

mysql> insert into musician values (1,'Fred
Bloggs','1948-01-02',null,1,2);
Query OK, 1 row affected (0.00 sec)

mysql> insert into musician values (2,'John
Smith','1950-03-03',null,3,4);
Query OK, 1 row affected (0.01 sec)

mysql> insert into musician values (3,'Helen
Smyth','1948-08-08',null,4,5);
Query OK, 1 row affected (0.00 sec)

mysql> insert into musician values (4,'Harriet
Smithson','1909-05-09','1980-09-20',5,6);
Query OK, 1 row affected (0.00 sec)

mysql> insert into musician values (5,'James
First','1965-06-10',null,7,7);
Query OK, 1 row affected (0.00 sec)

mysql> insert into musician values (6,'Theo
Mengel','1948-08-12',null,7,1);
Query OK, 1 row affected (0.00 sec)

mysql> insert into musician values (7,'Sue
Little','1945-02-21',null,8,9);
Query OK, 1 row affected (0.00 sec)

mysql> insert into musician values (8,'Harry
Forte','1951-02-28',null,1,8);
Query OK, 1 row affected (0.00 sec)

mysql> insert into musician values (9,'Phil Hot','1942-06-30',null,
2,7);
Query OK, 1 row affected (0.00 sec)

mysql> insert into musician values (10,'Jeff
Dawn','1945-12-12',null,3,6);
Query OK, 1 row affected (0.00 sec)

```
mysql> insert into musician values (11,'Rose
Spring','1948-05-25',null,4,5);
Query OK, 1 row affected (0.01 sec)

mysql> insert into musician values (12,'Davis
Heavan','1975-10-03',null,5,4);
Query OK, 1 row affected (0.00 sec)

mysql> insert into musician values (13,'Lovely
Time','1948-12-28',null,6,3);
Query OK, 1 row affected (0.00 sec)

mysql> insert into musician values (14,'Alan
Fluff','1935-01-15','1997-05-15',7,2);
Query OK, 1 row affected (0.01 sec)

mysql> insert into musician values (15,'Tony
Smythe','1932-04-02',null,8,1);
Query OK, 1 row affected (0.00 sec)

mysql> insert into musician values (16,'James
Quick','1924-08-08',null,9,2);
Query OK, 1 row affected (0.00 sec)

mysql> insert into musician values (17,'Freda
Miles','1920-07-04',null,9,3);
Query OK, 1 row affected (0.01 sec)

mysql> insert into musician values (18,'Elsie
James','1947-07-06',null,8,5);
Query OK, 1 row affected (0.01 sec)

mysql> insert into musician values (19,'Andy
Jones','1958-10-08',null,7,6);
Query OK, 1 row affected (0.00 sec)

mysql> insert into musician values (20,'Louise
Simpson','1948-01-10','1998-02-11',6,6);
Query OK, 1 row affected (0.00 sec)

mysql> insert into musician values (21,'James
Steeple','1947-01-10',null,5,6);
Query OK, 1 row affected (0.00 sec)

mysql> insert into musician values (22,'Steve
Chaytors','1956-03-11',null,6,7);
Query OK, 1 row affected (0.00 sec)

mysql> select * from musician;
+------+-----------------+------------+------------+---------
+-----------+
| m_no | m_name          | born       | died       | born_in |
living_in |
+------+-----------------+------------+------------+---------
```

```
+----------+
|     1 | Fred Bloggs     | 1948-01-02 | NULL       |       1 |       2 |
|     2 | John Smith      | 1950-03-03 | NULL       |       3 |       4 |
|     3 | Helen Smyth     | 1948-08-08 | NULL       |       4 |       5 |
|     4 | Harriet Smithson | 1909-05-09 | 1980-09-20 |       5 |       6 |
|     5 | James First     | 1965-06-10 | NULL       |       7 |       7 |
|     6 | Theo Mengel     | 1948-08-12 | NULL       |       7 |       1 |
|     7 | Sue Little      | 1945-02-21 | NULL       |       8 |       9 |
|     8 | Harry Forte     | 1951-02-28 | NULL       |       1 |       8 |
|     9 | Phil Hot        | 1942-06-30 | NULL       |       2 |       7 |
|    10 | Jeff Dawn       | 1945-12-12 | NULL       |       3 |       6 |
|    11 | Rose Spring     | 1948-05-25 | NULL       |       4 |       5 |
|    12 | Davis Heavan    | 1975-10-03 | NULL       |       5 |       4 |
|    13 | Lovely Time     | 1948-12-28 | NULL       |       6 |       3 |
|    14 | Alan Fluff      | 1935-01-15 | 1997-05-15 |       7 |       2 |
|    15 | Tony Smythe     | 1932-04-02 | NULL       |       8 |       1 |
|    16 | James Quick     | 1924-08-08 | NULL       |       9 |       2 |
|    17 | Freda Miles     | 1920-07-04 | NULL       |       9 |       3 |
|    18 | Elsie James     | 1947-07-06 | NULL       |       8 |       5 |
|    19 | Andy Jones      | 1958-10-08 | NULL       |       7 |       6 |
|    20 | Louise Simpson  | 1948-01-10 | 1998-02-11 |       6 |       6 |
|    21 | James Steeple   | 1947-01-10 | NULL       |       5 |       6 |
|    22 | Steve Chaytors  | 1956-03-11 | NULL       |       6 |       7 |
+------+----------------+-----------+-----------+---------+----------+
22 rows in set (0.00 sec)

mysql> create table place (place_no integer,place_town varchar(20),
place_country varchar(20));
Query OK, 0 rows affected (0.01 sec)

mysql> insert into place values (1,'Manchester','England');
```

```
Query OK, 1 row affected (0.01 sec)

mysql> insert into place values (2,'Edinburgh','Scotland');
Query OK, 1 row affected (0.00 sec)

mysql> insert into place values (3,'Salzburg','Austria');
Query OK, 1 row affected (0.01 sec)

mysql> insert into place values (4,'New York','USA');
Query OK, 1 row affected (0.00 sec)

mysql> insert into place values (5,'Birmingham','England');
Query OK, 1 row affected (0.01 sec)

mysql> insert into place values (6,'Glasgow','Scotland');
Query OK, 1 row affected (0.01 sec)

mysql> insert into place values (7,'London','England');
Query OK, 1 row affected (0.00 sec)

mysql> insert into place values (8,'Chicago','USA');
Query OK, 1 row affected (0.01 sec)

mysql> insert into place values (9,'Amsterdam','Netherlands');
Query OK, 1 row affected (0.00 sec)

mysql> select * from place;
+----------+------------+---------------+
| place_no | place_town | place_country |
+----------+------------+---------------+
|        1 | Manchester | England       |
|        2 | Edinburgh  | Scotland      |
|        3 | Salzburg   | Austria       |
|        4 | New York   | USA           |
|        5 | Birmingham | England       |
|        6 | Glasgow    | Scotland      |
|        7 | London     | England       |
|        8 | Chicago    | USA           |
|        9 | Amsterdam  | Netherlands   |
+----------+------------+---------------+
9 rows in set (0.00 sec)

mysql> create table performer (perf_no integer,perf_is
integer,instrument varchar(10),perf_type varchar(15));
Query OK, 0 rows affected (0.01 sec)

mysql> insert into performer values (1,2,'violin','classical');
Query OK, 1 row affected (0.01 sec)

mysql> insert into performer values (2,4,'viola','classical');
Query OK, 1 row affected (0.01 sec)

mysql> insert into performer values (3,6,'banjo','jazz');
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into performer values (4,8,'violin','classical');
Query OK, 1 row affected (0.01 sec)

mysql> insert into performer values (5,12,'guitar','jazz');
Query OK, 1 row affected (0.00 sec)

mysql> insert into performer values (6,14,'violin','classical');
Query OK, 1 row affected (0.01 sec)

mysql> insert into performer values (7,16,'bass','jazz');
Query OK, 1 row affected (0.00 sec)

mysql> insert into performer values (8,18,'viola','classical');
Query OK, 1 row affected (0.00 sec)

mysql> insert into performer values (9,20,'bass','jazz');
Query OK, 1 row affected (0.01 sec)

mysql> insert into performer values (10,2,'flute','jazz');
Query OK, 1 row affected (0.00 sec)

mysql> insert into performer values (11,20,'cornet','jazz');
Query OK, 1 row affected (0.00 sec)

mysql> insert into performer values (12,6,'violin','jazz');
Query OK, 1 row affected (0.01 sec)

mysql> insert into performer values (13,8,'drums','jazz');
Query OK, 1 row affected (0.00 sec)

mysql> insert into performer values (14,10,'viola','classical');
Query OK, 1 row affected (0.00 sec)

mysql> insert into performer values (15,12,'cello','classical');
Query OK, 1 row affected (0.01 sec)

mysql> insert into performer values (16,14,'viola','classical');
Query OK, 1 row affected (0.00 sec)

mysql> insert into performer values (17,16,'flute','jazz');
Query OK, 1 row affected (0.01 sec)

mysql> insert into performer values (18,18,'guitar','not known');
Query OK, 1 row affected (0.00 sec)

mysql> insert into performer values (19,20,'trombone','jazz');
Query OK, 1 row affected (0.00 sec)

mysql> insert into performer values (20,3,'horn','jazz');
Query OK, 1 row affected (0.01 sec)

mysql> insert into performer values (21,5,'violin','jazz');
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into performer values (22,7,'cello','classical');
Query OK, 1 row affected (0.01 sec)

mysql> insert into performer values (23,2,'bass','jazz');
Query OK, 1 row affected (0.01 sec)

mysql> insert into performer values (24,4,'violin','jazz');
Query OK, 1 row affected (0.00 sec)

mysql> insert into performer values (25,6,'drums','classical');
Query OK, 1 row affected (0.00 sec)

mysql> insert into performer values (26,8,'clarinet','jazz');
Query OK, 1 row affected (0.00 sec)

mysql> insert into performer values (27,10,'bass','jazz');
Query OK, 1 row affected (0.01 sec)

mysql> insert into performer values (28,12,'viola','classical');
Query OK, 1 row affected (0.01 sec)

mysql> insert into performer values (29,18,'cello','classical');
Query OK, 1 row affected (0.00 sec)

mysql> select * from performer;
+---------+---------+------------+-----------+
| perf_no | perf_is | instrument | perf_type |
+---------+---------+------------+-----------+
|       1 |       2 | violin     | classical |
|       2 |       4 | viola      | classical |
|       3 |       6 | banjo      | jazz      |
|       4 |       8 | violin     | classical |
|       5 |      12 | guitar     | jazz      |
|       6 |      14 | violin     | classical |
|       7 |      16 | bass       | jazz      |
|       8 |      18 | viola      | classical |
|       9 |      20 | bass       | jazz      |
|      10 |       2 | flute      | jazz      |
|      11 |      20 | cornet     | jazz      |
|      12 |       6 | violin     | jazz      |
|      13 |       8 | drums      | jazz      |
|      14 |      10 | viola      | classical |
|      15 |      12 | cello      | classical |
|      16 |      14 | viola      | classical |
|      17 |      16 | flute      | jazz      |
|      18 |      18 | guitar     | not known |
|      19 |      20 | trombone   | jazz      |
|      20 |       3 | horn       | jazz      |
|      21 |       5 | violin     | jazz      |
|      22 |       7 | cello      | classical |
|      23 |       2 | bass       | jazz      |
|      24 |       4 | violin     | jazz      |
|      25 |       6 | drums      | classical |
```

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|      26 |       8 | clarinet   | jazz      |
|      27 |      10 | bass       | jazz      |
|      28 |      12 | viola      | classical |
|      29 |      18 | cello      | classical |
+---------+---------+------------+-----------+
29 rows in set (0.00 sec)

mysql> create table composer (comp_no integer, comp_is integer,
comp_type varchar(10));
Query OK, 0 rows affected (0.01 sec)

mysql> insert into composer values (1,1,'jazz');
Query OK, 1 row affected (0.01 sec)

mysql> insert into composer values (2,3,'classical');
Query OK, 1 row affected (0.00 sec)

mysql> insert into composer values (3,5,'jazz');
Query OK, 1 row affected (0.00 sec)

mysql> insert into composer values (4,7,'classical');
Query OK, 1 row affected (0.01 sec)

mysql> insert into composer values (5,9,'jazz');
Query OK, 1 row affected (0.00 sec)

mysql> insert into composer values (6,11,'rock');
Query OK, 1 row affected (0.00 sec)

mysql> insert into composer values (7,13,'classical');
Query OK, 1 row affected (0.00 sec)

mysql> insert into composer values (8,15,'jazz');
Query OK, 1 row affected (0.00 sec)

mysql> insert into composer values (9,17,'classical');
Query OK, 1 row affected (0.00 sec)

mysql> insert into composer values (10,19,'jazz');
Query OK, 1 row affected (0.00 sec)

mysql> insert into composer values (11,10,'rock');
Query OK, 1 row affected (0.00 sec)

mysql> insert into composer values (12,8,'jazz');
Query OK, 1 row affected (0.01 sec)

mysql> select * from composer;
+---------+---------+-----------+
| comp_no | comp_is | comp_type |
+---------+---------+-----------+
|       1 |       1 | jazz      |
|       2 |       3 | classical |
|       3 |       5 | jazz      |
```

```
|        4 |        7 | classical |
|        5 |        9 | jazz      |
|        6 |       11 | rock      |
|        7 |       13 | classical |
|        8 |       15 | jazz      |
|        9 |       17 | classical |
|       10 |       19 | jazz      |
|       11 |       10 | rock      |
|       12 |        8 | jazz      |
+----------+----------+-----------+
12 rows in set (0.00 sec)

mysql> create table band (band_no integer,band_name
varchar(20),band_home integer,band_type varchar(15),b_date
date,band_contact integer);
Query OK, 0 rows affected (0.02 sec)

mysql> insert into band values (1,'ROP',5,'classical','2001-01-30',
11);
Query OK, 1 row affected (0.00 sec)

mysql> insert into band values (2,'AASO',6,'classical',null,10);
Query OK, 1 row affected (0.00 sec)

mysql> insert into band values (3,'The J Bs',8,'jazz',null,12);
Query OK, 1 row affected (0.00 sec)

mysql> insert into band values (4,'BBSO',9,'classical',null,21);
Query OK, 1 row affected (0.00 sec)

mysql> insert into band values (5,'The left Overs',2,'jazz',null,8);
Query OK, 1 row affected (0.01 sec)

mysql> insert into band values (6,'Somebody Loves this',
1,'jazz',null,6);
Query OK, 1 row affected (0.01 sec)

mysql> insert into band values (7,'Oh well',4,'classical',null,3);
Query OK, 1 row affected (0.00 sec)

mysql> insert into band values (8,'Swinging strings',
4,'classical',null,7);
Query OK, 1 row affected (0.01 sec)

mysql> insert into band values (9,'The Rest',9,'jazz',null,16);
Query OK, 1 row affected (0.00 sec)

mysql> select * from band;
+----------+--------------------+-----------+-----------
+------------+--------------+
| band_no | band_name          | band_home | band_type | b_date
| band_contact |
+----------+--------------------+-----------+-----------
+------------+--------------+
```

```
|        1 | ROP               |        5 | classical | 2001-01-30
|        11 |
|        2 | AASO              |        6 | classical | NULL
|        10 |
|        3 | The J Bs          |        8 | jazz      | NULL
|        12 |
|        4 | BBSO              |        9 | classical | NULL
|        21 |
|        5 | The left Overs    |        2 | jazz      | NULL
|         8 |
|        6 | Somebody Loves this |      1 | jazz      | NULL
|         6 |
|        7 | Oh well           |        4 | classical | NULL
|         3 |
|        8 | Swinging strings  |        4 | classical | NULL
|         7 |
|        9 | The Rest          |        9 | jazz      | NULL
|        16 |
+---------+-------------------+----------+-----------
+-----------+-------------+
9 rows in set (0.00 sec)

mysql> create table plays_in (player integer,band_id integer);
Query OK, 0 rows affected (0.00 sec)

mysql> insert into plays_in values (1,1);
Query OK, 1 row affected (0.01 sec)

mysql> insert into plays_in values (1,7);
Query OK, 1 row affected (0.00 sec)

mysql> insert into plays_in values (3,1);
Query OK, 1 row affected (0.01 sec)

mysql> insert into plays_in values (4,1);
Query OK, 1 row affected (0.00 sec)

mysql> insert into plays_in values (4,7);
Query OK, 1 row affected (0.00 sec)

mysql> insert into plays_in values (5,1);
Query OK, 1 row affected (0.00 sec)

mysql> insert into plays_in values (6,1);
Query OK, 1 row affected (0.00 sec)

mysql> insert into plays_in values (6,7);
Query OK, 1 row affected (0.00 sec)

mysql> insert into plays_in values (7,1);
Query OK, 1 row affected (0.00 sec)

mysql> insert into plays_in values (8,1);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into plays_in values (8,7);
Query OK, 1 row affected (0.01 sec)

mysql> insert into plays_in values (10,2);
Query OK, 1 row affected (0.00 sec)

mysql> insert into plays_in values (12,2);
Query OK, 1 row affected (0.01 sec)

mysql> insert into plays_in values (13,2);
Query OK, 1 row affected (0.00 sec)

mysql> insert into plays_in values (14,2);
Query OK, 1 row affected (0.00 sec)

mysql> insert into plays_in values (14,8);
Query OK, 1 row affected (0.00 sec)

mysql> insert into plays_in values (15,2);
Query OK, 1 row affected (0.01 sec)

mysql> insert into plays_in values (15,8);
Query OK, 1 row affected (0.01 sec)

mysql> insert into plays_in values (17,2);
Query OK, 1 row affected (0.00 sec)

mysql> insert into plays_in values (18,2);
Query OK, 1 row affected (0.00 sec)

mysql> insert into plays_in values (19,3);
Query OK, 1 row affected (0.00 sec)

mysql> insert into plays_in values (20,3);
Query OK, 1 row affected (0.00 sec)

mysql> insert into plays_in values (21,4);
Query OK, 1 row affected (0.01 sec)

mysql> insert into plays_in values (22,4);
Query OK, 1 row affected (0.00 sec)

mysql> insert into plays_in values (23,4);
Query OK, 1 row affected (0.00 sec)

mysql> insert into plays_in values (25,5);
Query OK, 1 row affected (0.00 sec)

mysql> insert into plays_in values (26,6);
Query OK, 1 row affected (0.01 sec)

mysql> insert into plays_in values (27,6);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into plays_in values (28,7);
Query OK, 1 row affected (0.01 sec)

mysql> insert into plays_in values (28,8);
Query OK, 1 row affected (0.00 sec)

mysql> insert into plays_in values (29,7);
Query OK, 1 row affected (0.01 sec)

mysql> select * from plays_in ;
+--------+---------+
| player | band_id |
+--------+---------+
|      1 |       1 |
|      1 |       7 |
|      3 |       1 |
|      4 |       1 |
|      4 |       7 |
|      5 |       1 |
|      6 |       1 |
|      6 |       7 |
|      7 |       1 |
|      8 |       1 |
|      8 |       7 |
|     10 |       2 |
|     12 |       2 |
|     13 |       2 |
|     14 |       2 |
|     14 |       8 |
|     15 |       2 |
|     15 |       8 |
|     17 |       2 |
|     18 |       2 |
|     19 |       3 |
|     20 |       3 |
|     21 |       4 |
|     22 |       4 |
|     23 |       4 |
|     25 |       5 |
|     26 |       6 |
|     27 |       6 |
|     28 |       7 |
|     28 |       8 |
|     29 |       7 |
+--------+---------+
31 rows in set (0.00 sec)

mysql> create table has_composed (cmpr_no integer,cmpn_no integer);
Query OK, 0 rows affected (0.01 sec)

mysql> insert into has_composed values (1,1);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into has_composed values (1,8);
Query OK, 1 row affected (0.00 sec)

mysql> insert into has_composed values (2,11);
Query OK, 1 row affected (0.00 sec)

mysql> insert into has_composed values (3,2);
Query OK, 1 row affected (0.00 sec)

mysql> insert into has_composed values (3,13);
Query OK, 1 row affected (0.00 sec)

mysql> insert into has_composed values (3,14);
Query OK, 1 row affected (0.00 sec)

mysql> insert into has_composed values (3,18);
Query OK, 1 row affected (0.01 sec)

mysql> insert into has_composed values (4,12);
Query OK, 1 row affected (0.00 sec)

mysql> insert into has_composed values (4,20);
Query OK, 1 row affected (0.00 sec)

mysql> insert into has_composed values (5,3);
Query OK, 1 row affected (0.00 sec)

mysql> insert into has_composed values (5,13);
Query OK, 1 row affected (0.00 sec)

mysql> insert into has_composed values (5,14);
Query OK, 1 row affected (0.00 sec)

mysql> insert into has_composed values (6,15);
Query OK, 1 row affected (0.00 sec)

mysql> insert into has_composed values (6,21);
Query OK, 1 row affected (0.00 sec)

mysql> insert into has_composed values (7,4);
Query OK, 1 row affected (0.00 sec)

mysql> insert into has_composed values (7,9);
Query OK, 1 row affected (0.00 sec)

mysql> insert into has_composed values (8,16);
Query OK, 1 row affected (0.00 sec)

mysql> insert into has_composed values (9,5);
Query OK, 1 row affected (0.01 sec)

mysql> insert into has_composed values (9,10);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into has_composed values (10,17);
Query OK, 1 row affected (0.00 sec)

mysql> insert into has_composed values (11,6);
Query OK, 1 row affected (0.00 sec)

mysql> insert into has_composed values (12,7);
Query OK, 1 row affected (0.00 sec)

mysql> insert into has_composed values (12,19);
Query OK, 1 row affected (0.00 sec)

mysql> select * from has_composed;
+---------+---------+
| cmpr_no | cmpn_no |
+---------+---------+
|       1 |       1 |
|       1 |       8 |
|       2 |      11 |
|       3 |       2 |
|       3 |      13 |
|       3 |      14 |
|       3 |      18 |
|       4 |      12 |
|       4 |      20 |
|       5 |       3 |
|       5 |      13 |
|       5 |      14 |
|       6 |      15 |
|       6 |      21 |
|       7 |       4 |
|       7 |       9 |
|       8 |      16 |
|       9 |       5 |
|       9 |      10 |
|      10 |      17 |
|      11 |       6 |
|      12 |       7 |
|      12 |      19 |
+---------+---------+
23 rows in set (0.00 sec)

mysql> create table performance (pfrmnc_no integer,gave
integer,performed integer,conducted_by integer, performed_in
integer);
Query OK, 0 rows affected (0.01 sec)

mysql> insert into performance values(1,1,1,21,1);
Query OK, 1 row affected (0.00 sec)

mysql> insert into performance values(2,1,3,21,1);
Query OK, 1 row affected (0.01 sec)

mysql> insert into performance values(3,1,5,21,1);
```

```
Query OK, 1 row affected (0.01 sec)

mysql> insert into performance values(4,1,2,1,2);
Query OK, 1 row affected (0.00 sec)

mysql> insert into performance values(5,2,4,21,2);
Query OK, 1 row affected (0.00 sec)

mysql> insert into performance values(6,2,6,21,2);
Query OK, 1 row affected (0.00 sec)

mysql> insert into performance values(7,4,19,9,3);
Query OK, 1 row affected (0.01 sec)

mysql> insert into performance values(8,4,20,10,3);
Query OK, 1 row affected (0.01 sec)

mysql> insert into performance values(8,4,20,10,3);
Query OK, 1 row affected (0.00 sec)

mysql> insert into performance values(9,5,12,10,4);
Query OK, 1 row affected (0.00 sec)

mysql> insert into performance values(10,5,13,11,4);
Query OK, 1 row affected (0.00 sec)

mysql> insert into performance values(11,3,5,13,5);
Query OK, 1 row affected (0.00 sec)

mysql> insert into performance values(12,3,6,13,5);
Query OK, 1 row affected (0.00 sec)

mysql> insert into performance values(13,3,7,13,5);
Query OK, 1 row affected (0.00 sec)

mysql> insert into performance values(14,6,20,14,6);
Query OK, 1 row affected (0.00 sec)

mysql> insert into performance values(15,8,12,15,7);
Query OK, 1 row affected (0.00 sec)

mysql> insert into performance values(16,9,16,21,8);
Query OK, 1 row affected (0.00 sec)

mysql> insert into performance values(17,9,17,21,8);
Query OK, 1 row affected (0.01 sec)

mysql> insert into performance values(18,9,18,21,8);
Query OK, 1 row affected (0.00 sec)

mysql> insert into performance values(19,9,19,21,8);
Query OK, 1 row affected (0.00 sec)

mysql> insert into performance values(20,4,12,10,3);
```

```
Query OK, 1 row affected (0.01 sec)

mysql> select * from performance;
+-----------+------+-----------+--------------+--------------+
| pfrmnc_no | gave | performed | conducted_by | performed_in |
+-----------+------+-----------+--------------+--------------+
|         1 |    1 |         1 |           21 |            1 |
|         2 |    1 |         3 |           21 |            1 |
|         3 |    1 |         5 |           21 |            1 |
|         4 |    1 |         2 |            1 |            2 |
|         5 |    2 |         4 |           21 |            2 |
|         6 |    2 |         6 |           21 |            2 |
|         7 |    4 |        19 |            9 |            3 |
|         8 |    4 |        20 |           10 |            3 |
|         8 |    4 |        20 |           10 |            3 |
|         9 |    5 |        12 |           10 |            4 |
|        10 |    5 |        13 |           11 |            4 |
|        11 |    3 |         5 |           13 |            5 |
|        12 |    3 |         6 |           13 |            5 |
|        13 |    3 |         7 |           13 |            5 |
|        14 |    6 |        20 |           14 |            6 |
|        15 |    8 |        12 |           15 |            7 |
|        16 |    9 |        16 |           21 |            8 |
|        17 |    9 |        17 |           21 |            8 |
|        18 |    9 |        18 |           21 |            8 |
|        19 |    9 |        19 |           21 |            8 |
|        20 |    4 |        12 |           10 |            3 |
+-----------+------+-----------+--------------+--------------+
21 rows in set (0.00 sec)

mysql> create table composition (c_no integer,comp_date date,c_title
varchar(20),c_in integer);
Query OK, 0 rows affected (0.03 sec)

mysql> insert into composition values (1,'1975-06-17','Optus 1',1);
Query OK, 1 row affected (0.01 sec)

mysql> insert into composition values (2,'1976-07-21','Here Goes',
2);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composition values (3,'1981-12-14','Valiant
Knight',3);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composition values (4,'1982-01-12','Little
Piece',4);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composition values (5,'1985-03-13','Simple Song',
5);
Query OK, 1 row affected (0.01 sec)

mysql> insert into composition values (6,'1986-04-14','Little Swing
```

```
SOng',6);
Query OK, 1 row affected (0.01 sec)

mysql> insert into composition values (7,'1987-05-13','Fast
Journey',7);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composition values (8,'1976-02-14','Simple Love
Song',8);
Query OK, 1 row affected (0.01 sec)

mysql> insert into composition values (9,'1982-01-21','Complex
Rythms',9);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composition values (10,'1985-02-23','Drumming
Rythms',9);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composition values (11,'1978-03-18','Fast
Drumming',8);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composition values (12,'1984-08-13','Slow Song',
7);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composition values (13,'1968-09-14','Blue Roses',
6);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composition values (14,'1983-11-15','Velvet
Rain',5);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composition values (15,'1982-05-16','Cold Wind',
4);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composition values (16,'1983-06-18','After the
Wind Blows',3);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composition values (17,null,'A Simple Piece',2);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composition values (18,'1985-01-12','Long
Rythms',1);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composition values (19,'1988-02-12','Eastern
Wind',1);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into composition values (20,null,'Slow Symphony Blow',
2);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composition values (21,'1990-07-12','A Last
Song',6);
Query OK, 1 row affected (0.01 sec)

mysql> select * from composition;
+------+------------+--------------------+------+
| c_no | comp_date  | c_title            | c_in |
+------+------------+--------------------+------+
|    1 | 1975-06-17 | Optus 1            |    1 |
|    2 | 1976-07-21 | Here Goes          |    2 |
|    3 | 1981-12-14 | Valiant Knight     |    3 |
|    4 | 1982-01-12 | Little Piece       |    4 |
|    5 | 1985-03-13 | Simple Song        |    5 |
|    6 | 1986-04-14 | Little Swing SOng  |    6 |
|    7 | 1987-05-13 | Fast Journey       |    7 |
|    8 | 1976-02-14 | Simple Love Song   |    8 |
|    9 | 1982-01-21 | Complex Rythms     |    9 |
|   10 | 1985-02-23 | Drumming Rythms    |    9 |
|   11 | 1978-03-18 | Fast Drumming      |    8 |
|   12 | 1984-08-13 | Slow Song          |    7 |
|   13 | 1968-09-14 | Blue Roses         |    6 |
|   14 | 1983-11-15 | Velvet Rain        |    5 |
|   15 | 1982-05-16 | Cold Wind          |    4 |
|   16 | 1983-06-18 | After the Wind Blows |  3 |
|   17 | NULL       | A Simple Piece     |    2 |
|   18 | 1985-01-12 | Long Rythms        |    1 |
|   19 | 1988-02-12 | Eastern Wind       |    1 |
|   20 | NULL       | Slow Symphony Blow |    2 |
|   21 | 1990-07-12 | A Last Song        |    6 |
+------+------------+--------------------+------+
21 rows in set (0.00 sec)

mysql> create table concert (concert_no integer,concert_venue
varchar(25),concert_in integer,con_date date,concert_orgniser
integer);
Query OK, 0 rows affected (0.01 sec)

mysql> insert into concert values (1,'Bridgewater Hall',
1,'1995-01-06',21);
Query OK, 1 row affected (0.00 sec)

mysql> insert into concert values (2,'Bridgewater Hall',
1,'1996-05-08',3);
Query OK, 1 row affected (0.00 sec)

mysql> insert into concert values (3,'Usher Hall',2,'1995-06-03',3);
Query OK, 1 row affected (0.00 sec)

mysql> insert into concert values (4,'Assembly Rooms',
2,'1997-09-20',21);
```

```
Query OK, 1 row affected (0.00 sec)

mysql> insert into concert values (5,'Festspiel Haus',
3,'1995-02-21',8);
Query OK, 1 row affected (0.00 sec)

mysql> insert into concert values (6,'Royal Albert Hall',
7,'1993-04-12',8);
Query OK, 1 row affected (0.00 sec)

mysql> insert into concert values (7,'Concertgebouw',9,'1993-05-14',
8);
Query OK, 1 row affected (0.00 sec)

mysql> insert into concert values (8,'Metropolitan',4,'1997-06-15',
21);
Query OK, 1 row affected (0.00 sec)

mysql> select * from concert;
+------------+-------------------+------------+------------
+-----------------+
| concert_no | concert_venue     | concert_in | con_date   |
concert_orgniser |
+------------+-------------------+------------+------------
+-----------------+
|          1 | Bridgewater Hall  |          1 | 1995-01-06 |
21 |
|          2 | Bridgewater Hall  |          1 | 1996-05-08 |
3 |
|          3 | Usher Hall        |          2 | 1995-06-03 |
3 |
|          4 | Assembly Rooms    |          2 | 1997-09-20 |
21 |
|          5 | Festspiel Haus    |          3 | 1995-02-21 |
8 |
|          6 | Royal Albert Hall |          7 | 1993-04-12 |
8 |
|          7 | Concertgebouw     |          9 | 1993-05-14 |
8 |
|          8 | Metropolitan      |          4 | 1997-06-15 |
21 |
+------------+-------------------+------------+------------
+-----------------+
8 rows in set (0.00 sec)

mysql> create table composed (cmpr_no integer,cmpn_no integer);
Query OK, 0 rows affected (0.02 sec)

mysql> insert into composed values (1,1);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composed values (1,8);
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into composed values (2,11);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composed values (3,2);
Query OK, 1 row affected (0.01 sec)

mysql> insert into composed values (3,13);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composed values (3,14);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composed values (3,18);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composed values (4,12);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composed values (4,20);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composed values (5,3);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composed values (5,13);
Query OK, 1 row affected (0.01 sec)

mysql> insert into composed values (5,14);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composed values (6,15);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composed values (6,21);
Query OK, 1 row affected (0.01 sec)

mysql> insert into composed values (7,4);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composed values (7,9);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composed values (8,16);
Query OK, 1 row affected (0.01 sec)

mysql> insert into composed values (9,5);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composed values (9,10);
Query OK, 1 row affected (0.01 sec)

mysql> insert into composed values (10,17);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into composed values (11,6);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composed values (12,7);
Query OK, 1 row affected (0.00 sec)

mysql> insert into composed values (12,19);
Query OK, 1 row affected (0.00 sec)

mysql> select * from composed;
+---------+---------+
| cmpr_no | cmpn_no |
+---------+---------+
|       1 |       1 |
|       1 |       8 |
|       2 |      11 |
|       3 |       2 |
|       3 |      13 |
|       3 |      14 |
|       3 |      18 |
|       4 |      12 |
|       4 |      20 |
|       5 |       3 |
|       5 |      13 |
|       5 |      14 |
|       6 |      15 |
|       6 |      21 |
|       7 |       4 |
|       7 |       9 |
|       8 |      16 |
|       9 |       5 |
|       9 |      10 |
|      10 |      17 |
|      11 |       6 |
|      12 |       7 |
|      12 |      19 |
+---------+---------+
23 rows in set (0.00 sec)

PROBLEM SET 05 –
QUERIES –

1. mysql> select m_name from musician join concert on
musician.m_no=concert.concert_orgniser where concert_venue='Assembly
Rooms' and con_date > '1997-02-01';
+---------------+
| m_name        |
+---------------+
| James Steeple |
+---------------+
1 row in set (0.01 sec)

2. mysql> select m_name from performer join musician on
performer.perf_is=musician.m_no join place on
```

```
musician.born_in=place.place_no where performer.instrument in
('guitar','violin') and place.place_country='England';
+------------------+
| m_name           |
+------------------+
| Harry Forte      |
| Davis Heavan     |
| Alan Fluff       |
| Theo Mengel      |
| James First      |
| Harriet Smithson |
+------------------+
6 rows in set (0.00 sec)
```

3. mysql> select m_name,place_town,con_date from musician join concert on musician.m_no=concert.concert_orgniser join place on concert.concert_in=place.place_no where place.place_country='USA';

```
+--------------+------------+------------+
| m_name       | place_town | con_date   |
+--------------+------------+------------+
| James Steeple | New York   | 1997-06-15 |
+--------------+------------+------------+
1 row in set (0.00 sec)
```

4. mysql> select con_date,place_town,c_title from band b join performance p join concert c join composition cc join place on b.band_no =p.gave and p.performed_in =c.concert_no and p.performed=cc.c_no and c.concert_in=place.place_no where performed=(select cmpn_no from musician m join composer c join composed cc join composition on m.m_no=c.comp_is and c.comp_no=cc.cmpr_no and cc.cmpr_no=composition.c_no where m_name="andy jones");

```
+------------+------------+----------------+
| con_date   | place_town | c_title        |
+------------+------------+----------------+
| 1997-06-15 | New York   | A Simple Piece |
+------------+------------+----------------+
1 row in set (0.01 sec)
```

5. mysql> select instrument,avg(cnt)as average from(select distinct(instrument),count(*)as cnt from performer group by instrument)as temp group by instrument;

```
+------------+---------+
| instrument | average |
+------------+---------+
| violin     | 6.0000  |
| viola      | 5.0000  |
| banjo      | 1.0000  |
| guitar     | 2.0000  |
| bass       | 4.0000  |
| flute      | 2.0000  |
| cornet     | 1.0000  |
| drums      | 2.0000  |
| cello      | 3.0000  |
```

```
| trombone   | 1.0000 |
| horn       | 1.0000 |
| clarinet   | 1.0000 |
+-----------+---------+
12 rows in set (0.00 sec)
```

6. mysql> select distinct(m_name),born,instrument from musician m join performer p on m.m_no=p.perf_is where died is null and instrument in(select instrument from musician m join performer p on m.m_no=p.perf_is where m_name like '%theo%');

```
+-------------+------------+------------+
| m_name      | born       | instrument |
+-------------+------------+------------+
| Theo Mengel | 1948-08-12 | banjo      |
| John Smith  | 1950-03-03 | violin     |
| Harry Forte | 1951-02-28 | violin     |
| Theo Mengel | 1948-08-12 | violin     |
| James First | 1965-06-10 | violin     |
| Harry Forte | 1951-02-28 | drums      |
| Theo Mengel | 1948-08-12 | drums      |
+-------------+------------+------------+
7 rows in set (0.00 sec)
```

7. mysql> select band_id,count(*)as cnt,band_name from plays_in p join band b on p.band_id=b.band_no group by band_id having cnt>(select avg(cntt) from (select count(*) as cntt from plays_in group by band_id)as temp2);

```
+---------+-----+-----------+
| band_id | cnt | band_name |
+---------+-----+-----------+
|       1 |   7 | ROP       |
|       7 |   6 | Oh well   |
|       2 |   7 | AASO      |
+---------+-----+-----------+
3 rows in set (0.00 sec)
```

8. mysql> select m_name as name from concert c join musician m join composer cc join composed ccc join composition cccc on c.concert_orgniser=m.m_no and c.concert_orgniser=cc.comp_is and cc.comp_no=ccc.cmpr_no and ccc.cmpn_no=cccc.c_no where concert_in in (select place_no from place where place_country in("england","scotland")) and living_in in (select place_no from place where place_country in("england","scotland")) and c_in in (select place_no from place where place_country in ("england","scotland"));
Empty set (0.01 sec)

9. mysql> select m_name as name from(select m_name,dense_rank() over(order by count(*))as rankk from performer p join musician m on p.perf_is=m.m_no group by instrument)as temp where rankk=1;

```
+----------------+
| name           |
+----------------+
| Theo Mengel    |
```

```
| Louise Simpson |
| Louise Simpson |
| Helen Smyth    |
| Harry Forte    |
+----------------+
5 rows in set (0.00 sec)
```

10. mysql> select band_name,c_title as title from band b join performance p join composition c on b.band_no =p.gave and p.performed = c.c_no where performed in(select cmpn_no from musician m join composer c join composed cc on m.m_no=c.comp_is and c.comp_no=cc.cmpr_no where m_name="sue little");

```
+--------------------+--------------------+
| band_name          | title              |
+--------------------+--------------------+
| BBSO               | Slow Song          |
| The left Overs     | Slow Song          |
| Swinging strings   | Slow Song          |
| BBSO               | Slow Symphony Blow |
| BBSO               | Slow Symphony Blow |
| Somebody Loves this | Slow Symphony Blow |
+--------------------+--------------------+
6 rows in set (0.00 sec)
```

11. mysql> select m_name,place_town from musician m join place pp on m.born_in =pp.place_no where place_no in (select born_in from musician where m_name ="james first") and m_name <>"james first";

```
+-------------+------------+
| m_name      | place_town |
+-------------+------------+
| Theo Mengel | London     |
| Alan Fluff  | London     |
| Andy Jones  | London     |
+-------------+------------+
3 rows in set (0.00 sec)
```

12. mysql> select temp1.m_name,instrument_count,composition_count from ((select m_name,born_in,count(*)as instrument_count from musician m
    -> join performer p on m.m_no=p.perf_is group by m_no having born_in in(select place_no from place where place_country in ("scotland","england")))as temp1
    -> join (select m_name,born_in,count(*)as composition_count from musician m join composer c join composed cc on m.m_no=c.comp_is and
    -> c.comp_no=cc.cmpr_no group by m_no having m.born_in in(select place_no from place where place_country in ("scotland","england")))as temp2 on temp1.m_name=temp2.m_name);

```
+-------------+------------------+-------------------+
| m_name      | instrument_count | composition_count |
+-------------+------------------+-------------------+
| James First |                1 |                 4 |
| Harry Forte |                3 |                 2 |
+-------------+------------------+-------------------+
2 rows in set (0.00 sec)
```

13. mysql> select band_no,band_name,band_contact,conducted_by from
band b join performance p on b.band_no=p.gave where performed_in in
(select concert_no from concert where concert_venue="royal albert
hall" order by con_date desc);

```
+---------+--------------------+--------------+--------------+
| band_no | band_name          | band_contact | conducted_by |
+---------+--------------------+--------------+--------------+
|       6 | Somebody Loves this |            6 |           14 |
+---------+--------------------+--------------+--------------+
```
1 row in set (0.00 sec)

14. mysql> select m_name,case when born_in =(select place_no from
place where place_town="glasgow") then "glasgow" else "somewhere
else" end as born_in,
    -> case when living_in=(select place_no from place where
place_town="glasgow") then "glasgow" else "somewhere else" end as
living_in
    -> ,case when c_in =(select place_no from place where
place_town="glasgow") then "glasgow" else "somewhere else" end as
c_in
    -> from musician m join composer c join composed cc join
composition ccc on m.m_no=c.comp_is and c.comp_no=cc.cmpr_no and
cc.cmpn_no=ccc.c_no
    -> where born_in =(select place_no from place where
place_town="glasgow") or living_in in (select place_no from place
where place_town="glasgow") or c_in
    -> in (select place_no from place where place_town="glasgow")
group by m_name;

```
+-------------+----------------+----------------+----------------+
| m_name      | born_in        | living_in      | c_in           |
+-------------+----------------+----------------+----------------+
| Lovely Time | glasgow        | somewhere else | somewhere else |
| Jeff Dawn   | somewhere else | glasgow        | glasgow        |
| James First | somewhere else | somewhere else | glasgow        |
| Phil Hot    | somewhere else | somewhere else | glasgow        |
| Andy Jones  | somewhere else | glasgow        | somewhere else |
| Rose Spring | somewhere else | somewhere else | glasgow        |
+-------------+----------------+----------------+----------------+
```
6 rows in set (0.00 sec)

15. mysql> select * from ((select player,m_name from plays_in p join
musician m on p.player=m.m_no where band_id=(select band_id from
musician m join plays_in p on m.m_no= p.player where m_name="sue
little")) as temp1 join (select player,m_name from plays_in p join
musician m on p.player=m.m_no where band_id=(select band_id from
musician m join plays_in p on m.m_no= p.player where m_name="jeff
dawn"))a
Empty set (0.00 sec)