

Owing to distortions in formatting of the given table in the provided MS Word Lab Book 1 document, this author has reproduced the given SQL commands without use of a table for ease of viewing.

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Course: MSc Computer Science (Conversion)

Course Module: COMP40725

Course Instructor: Dr. Mark Scanlon

Lab Book No.: 1

1. `SELECT version(), user();`

```
mysql> SELECT version(), user();
+-----+-----+
| version() | user()      |
+-----+-----+
| 5.5.33    | root@localhost |
+-----+-----+
1 row in set (0.00 sec)
```

2. `SELECT current_date;`

```
mysql> SELECT current_date;
+-----+
| current_date |
+-----+
| 2014-01-24   |
+-----+
1 row in set (0.00 sec)
```

3. `CREATE database menagerie;`

```
mysql> CREATE database menagerie;  
Query OK, 1 row affected (0.05 sec)
```

4. USE menagerie;

```
mysql> USE menagerie;  
Database changed
```

5. CREATE table pet (name varchar(20), owner varchar(20), species varchar(20), sex char(1), birth date, death date);

```
mysql> CREATE table pet (name varchar(20), owner varchar(20),  
-> species varchar(20), sex char(1), birth date,  
-> death date );  
Query OK, 0 rows affected (0.07 sec)
```

6. SHOW tables;

```
mysql> SHOW tables;  
+-----+  
| Tables_in_menagerie |  
+-----+  
| pet                  |  
+-----+  
1 row in set (0.00 sec)
```

7. DESCRIBE pet;

```
mysql> DESCRIBE pet;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| name  | varchar(20)   | YES  |     | NULL    |       |
| owner | varchar(20)   | YES  |     | NULL    |       |
| species | varchar(20) | YES  |     | NULL    |       |
| sex   | char(1)       | YES  |     | NULL    |       |
| birth | date          | YES  |     | NULL    |       |
| death | date          | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.01 sec)
```

8. LOAD DATA LOCAL INFILE 'c:\\temp\\pet.txt'  
replace  
into table pet  
fields terminated by ',' lines terminated by '\\n';

```
mysql> LOAD DATA LOCAL INFILE '/Users/noreen/Desktop/Pet.txt'
-> replace into table pet fields terminated by ','
-> lines terminated by '\\n';
Query OK, 8 rows affected, 7 warnings (0.04 sec)
Records: 8 Deleted: 0 Skipped: 0 Warnings: 7
```

9. SELECT \* FROM pet;

```
mysql> SELECT * FROM pet;
+-----+-----+-----+-----+-----+-----+
| name   | owner | species | sex  | birth   | death   |
+-----+-----+-----+-----+-----+-----+
| Fluffy | Harold | cat     | f    | 2008-02-04 | NULL    |
| Claws  | Gwen  | cat     | m    | 2009-03-17 | NULL    |
| Buffy  | Harold | dog     | f    | 2004-05-13 | NULL    |
| Fang   | Benny  | dog     | m    | 2005-08-27 | NULL    |
| Bowser | Diane  | dog     | m    | 1994-08-31 | 2010-07-29 |
| Chirpy | Gwen  | bird    | f    | 2012-09-11 | NULL    |
| Whistler | Gwen | bird    |      | 2012-12-09 | NULL    |
| Slim   | Benny  | snake   | m    | 2011-04-29 | NULL    |
+-----+-----+-----+-----+-----+-----+
8 rows in set (0.00 sec)
```

10.     INSERT INTO pet values (  
         'puffball','diane','hamster',  
         'f','2010-03-30',null  
     );

```
mysql> INSERT INTO pet values ('puffball', 'diane', 'hamster',  

-> 'f', '2010-03-30', null);
Query OK, 1 row affected (0.05 sec)
```

11.     SELECT \* FROM pet;

```
mysql> SELECT * FROM pet;
+-----+-----+-----+-----+-----+-----+
| name   | owner | species | sex  | birth   | death   |
+-----+-----+-----+-----+-----+-----+
| Fluffy | Harold | cat     | f    | 2008-02-04 | NULL    |
| Claws  | Gwen  | cat     | m    | 2009-03-17 | NULL    |
| Buffy  | Harold | dog     | f    | 2004-05-13 | NULL    |
| Fang   | Benny  | dog     | m    | 2005-08-27 | NULL    |
| Bowser | Diane  | dog     | m    | 1994-08-31 | 2010-07-29 |
| Chirpy | Gwen  | bird    | f    | 2012-09-11 | NULL    |
| Whistler | Gwen | bird    |      | 2012-12-09 | NULL    |
| Slim   | Benny  | snake   | m    | 2011-04-29 | NULL    |
| puffball | diane | hamster | f    | 2010-03-30 | NULL    |
+-----+-----+-----+-----+-----+-----+
9 rows in set (0.00 sec)
```

12.     update pet  
      set birth = '2006-08-31' WHERE name = 'bowser';

```
mysql> update pet set birth = '2006-08-31' WHERE  
      -> name = 'bowser';  
Query OK, 1 row affected (0.04 sec)  
Rows matched: 1  Changed: 1  Warnings: 0
```

13.     SELECT \* FROM pet;

```
mysql> SELECT * FROM pet;  
+-----+-----+-----+-----+-----+-----+  
| name   | owner | species | sex | birth       | death       |  
+-----+-----+-----+-----+-----+-----+  
| Fluffy | Harold | cat      | f   | 2008-02-04 | NULL        |  
| Claws  | Gwen  | cat      | m   | 2009-03-17 | NULL        |  
| Buffy  | Harold | dog      | f   | 2004-05-13 | NULL        |  
| Fang   | Benny | dog      | m   | 2005-08-27 | NULL        |  
| Bowser | Diane | dog      | m   | 2006-08-31 | 2010-07-29 |  
| Chirpy | Gwen  | bird     | f   | 2012-09-11 | NULL        |  
| Whistler | Gwen | bird     |     | 2012-12-09 | NULL        |  
| Slim   | Benny | snake    | m   | 2011-04-29 | NULL        |  
| puffball | diane | hamster  | f   | 2010-03-30 | NULL        |  
+-----+-----+-----+-----+-----+-----+  
9 rows in set (0.00 sec)
```

14.     SELECT \* FROM pet  
      WHERE birth >= '2011-1-1';

```
mysql> SELECT * FROM pet WHERE birth >= '2011-1-1';  
+-----+-----+-----+-----+-----+-----+  
| name   | owner | species | sex | birth       | death       |  
+-----+-----+-----+-----+-----+-----+  
| Chirpy | Gwen  | bird     | f   | 2012-09-11 | NULL        |  
| Whistler | Gwen | bird     |     | 2012-12-09 | NULL        |  
| Slim   | Benny | snake    | m   | 2011-04-29 | NULL        |  
+-----+-----+-----+-----+-----+-----+  
3 rows in set (0.00 sec)
```

15.     SELECT \* FROM pet  
      WHERE species = 'dog' AND sex = 'f';

```
mysql> SELECT * FROM pet WHERE species = 'dog' AND sex = 'f';
+-----+-----+-----+-----+-----+-----+
| name | owner | species | sex | birth      | death |
+-----+-----+-----+-----+-----+-----+
| Buffy | Harold | dog     | f   | 2004-05-13 | NULL  |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

16.     SELECT \* FROM pet  
         WHERE species = 'snake' OR species = 'bird';

```
mysql> SELECT * FROM pet WHERE species = 'snake' OR
-> species = 'bird';
+-----+-----+-----+-----+-----+-----+
| name | owner | species | sex | birth      | death |
+-----+-----+-----+-----+-----+-----+
| Chirpy | Gwen | bird     | f   | 2012-09-11 | NULL  |
| Whistler | Gwen | bird     |     | 2012-12-09 | NULL  |
| Slim   | Benny | snake    | m   | 2011-04-29 | NULL  |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

17.     SELECT \* FROM pet  
         WHERE (species = 'cat' AND sex = 'm');

```
mysql> SELECT * FROM pet WHERE (species = 'cat'
-> AND sex = 'm');
+-----+-----+-----+-----+-----+-----+
| name | owner | species | sex | birth      | death |
+-----+-----+-----+-----+-----+-----+
| Claws | Gwen | cat     | m   | 2009-03-17 | NULL  |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

18.     SELECT \* FROM pet  
         WHERE (species = 'cat' AND sex = 'm') OR (species =  
         'dog' AND sex = 'f');

```
mysql> SELECT * FROM pet WHERE (species = 'cat' AND
-> sex = 'm') OR (species = 'dog' AND sex = 'f');
+-----+-----+-----+-----+-----+
| name | owner | species | sex | birth | death |
+-----+-----+-----+-----+-----+
| Claws | Gwen | cat | m | 2009-03-17 | NULL |
| Buffy | Harold | dog | f | 2004-05-13 | NULL |
+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

19. SELECT name, birth FROM pet;

```
mysql> SELECT name, birth FROM pet;
+-----+-----+
| name | birth |
+-----+-----+
| Fluffy | 2008-02-04 |
| Claws | 2009-03-17 |
| Buffy | 2004-05-13 |
| Fang | 2005-08-27 |
| Bowser | 2006-08-31 |
| Chirpy | 2012-09-11 |
| Whistler | 2012-12-09 |
| Slim | 2011-04-29 |
| puffball | 2010-03-30 |
+-----+-----+
9 rows in set (0.00 sec)
```

20. SELECT owner FROM pet;

```
mysql> SELECT owner FROM pet;
+-----+
| owner |
+-----+
| Harold |
| Gwen  |
| Harold |
| Benny  |
| Diane  |
| Gwen  |
| Gwen  |
| Benny  |
| diane  |
+-----+
9 rows in set (0.00 sec)
```

21.     SELECT distinct owner FROM pet;

```
mysql> SELECT distinct owner FROM pet;
+-----+
| owner |
+-----+
| Harold |
| Gwen  |
| Benny  |
| Diane  |
+-----+
4 rows in set (0.00 sec)
```

22.     SELECT name, species, birth  
FROM pet  
WHERE species = 'dog' OR species = 'cat';



```
mysql> SELECT name, species, birth FROM pet
-> WHERE species = 'dog' OR species = 'cat';
```

name	species	birth
Fluffy	cat	2008-02-04
Claws	cat	2009-03-17
Buffy	dog	2004-05-13
Fang	dog	2005-08-27
Bowser	dog	2006-08-31

```
5 rows in set (0.00 sec)
```

23.     SELECT name, birth  
FROM pet ORDER BY birth;

```
mysql> SELECT name, birth FROM pet ORDER BY birth;
```

name	birth
Buffy	2004-05-13
Fang	2005-08-27
Bowser	2006-08-31
Fluffy	2008-02-04
Claws	2009-03-17
puffball	2010-03-30
Slim	2011-04-29
Chirpy	2012-09-11
Whistler	2012-12-09

```
9 rows in set (0.00 sec)
```

24.     SELECT name, birth  
FROM pet  
ORDER BY name;

```
mysql> SELECT name, birth FROM pet ORDER BY name;
```

```
+-----+-----+
| name   | birth   |
+-----+-----+
| Bowser | 2006-08-31 |
| Buffy  | 2004-05-13 |
| Chirpy | 2012-09-11 |
| Claws  | 2009-03-17 |
| Fang   | 2005-08-27 |
| Fluffy | 2008-02-04 |
| puffball | 2010-03-30 |
| Slim   | 2011-04-29 |
| Whistler | 2012-12-09 |
+-----+-----+
9 rows in set (0.00 sec)
```

25.

```
SELECT name, birth FROM pet
ORDER BY name desc;
```

```
mysql> SELECT name, birth FROM pet ORDER BY name desc;
```

```
+-----+-----+
| name   | birth   |
+-----+-----+
| Whistler | 2012-12-09 |
| Slim     | 2011-04-29 |
| puffball | 2010-03-30 |
| Fluffy   | 2008-02-04 |
| Fang     | 2005-08-27 |
| Claws    | 2009-03-17 |
| Chirpy   | 2012-09-11 |
| Buffy    | 2004-05-13 |
| Bowser   | 2006-08-31 |
+-----+-----+
9 rows in set (0.00 sec)
```

26. SELECT name, species, birth

```
FROM pet ORDER BY species, birth desc;
```

```
mysql> SELECT name, species, birth FROM pet
-> ORDER BY species, birth desc;
+-----+-----+-----+
| name   | species | birth   |
+-----+-----+-----+
| Whistler | bird    | 2012-12-09 |
| Chirpy  | bird    | 2012-09-11 |
| Claws   | cat     | 2009-03-17 |
| Fluffy  | cat     | 2008-02-04 |
| Bowser  | dog     | 2006-08-31 |
| Fang    | dog     | 2005-08-27 |
| Buffy   | dog     | 2004-05-13 |
| puffball | hamster | 2010-03-30 |
| Slim    | snake   | 2011-04-29 |
+-----+-----+-----+
9 rows in set (0.00 sec)
```

```
27. SELECT name, birth, curdate(),
(year(curdate())-year(birth))
- (right(curdate(),5) < right(birth,5)) as age
```

```
FROM pet;
```

```
mysql> SELECT name, birth, curdate(), (year(curdate()) - year(birth)) - (right(c
urdate(), 5) < right(birth,5)) as age FROM pet;
+-----+-----+-----+-----+
| name   | birth   | curdate() | age |
+-----+-----+-----+-----+
| Fluffy  | 2008-02-04 | 2014-01-24 | 5 |
| Claws   | 2009-03-17 | 2014-01-24 | 4 |
| Buffy   | 2004-05-13 | 2014-01-24 | 9 |
| Fang    | 2005-08-27 | 2014-01-24 | 8 |
| Bowser  | 2006-08-31 | 2014-01-24 | 7 |
| Chirpy  | 2012-09-11 | 2014-01-24 | 1 |
| Whistler | 2012-12-09 | 2014-01-24 | 1 |
| Slim    | 2011-04-29 | 2014-01-24 | 2 |
| puffball | 2010-03-30 | 2014-01-24 | 3 |
+-----+-----+-----+-----+
9 rows in set (0.00 sec)
```

```

28. SELECT name, birth, curdate(),
      (year(curdate()) - year(birth))
      - (right(curdate(), 5) < right(birth, 5)) as age
FROM pet
ORDER BY name;

```

```

mysql> SELECT name, birth, curdate(), (year(curdate()) - year(birth)) - (right(c
urdate(), 5) < right(birth, 5)) as age FROM pet ORDER BY name;
+-----+-----+-----+-----+
| name   | birth   | curdate() | age |
+-----+-----+-----+-----+
| Bowser | 2006-08-31 | 2014-01-24 | 7 |
| Buffy  | 2004-05-13 | 2014-01-24 | 9 |
| Chirpy | 2012-09-11 | 2014-01-24 | 1 |
| Claws  | 2009-03-17 | 2014-01-24 | 4 |
| Fang   | 2005-08-27 | 2014-01-24 | 8 |
| Fluffy | 2008-02-04 | 2014-01-24 | 5 |
| puffball | 2010-03-30 | 2014-01-24 | 3 |
| Slim   | 2011-04-29 | 2014-01-24 | 2 |
| Whistler | 2012-12-09 | 2014-01-24 | 1 |
+-----+-----+-----+-----+
9 rows in set (0.00 sec)

```

```

29. SELECT name, birth, death,
      (year(death) - year(birth))
      - (right(death, 5) < right(birth, 5)) as age
FROM pet
WHERE death is not null ORDER BY name;

```

```
mysql> SELECT name, birth, death, (year(death)-year(birth)) -
-> (right(death,5) < right(birth,5)) as age FROM pet
-> WHERE death is not null ORDER BY name;
+-----+-----+-----+-----+
| name   | birth       | death       | age  |
+-----+-----+-----+-----+
| Bowser | 2006-08-31  | 2010-07-29  | 3    |
+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

30. SELECT name, birth, month(birth)

FROM pet;

```
mysql> SELECT name, birth, month(birth) FROM pet;
+-----+-----+-----+
| name   | birth       | month(birth) |
+-----+-----+-----+
| Fluffy | 2008-02-04  | 2            |
| Claws  | 2009-03-17  | 3            |
| Buffy  | 2004-05-13  | 5            |
| Fang   | 2005-08-27  | 8            |
| Bowser | 2006-08-31  | 8            |
| Chirpy | 2012-09-11  | 9            |
| Whistler | 2012-12-09 | 12           |
| Slim   | 2011-04-29  | 4            |
| puffball | 2010-03-30 | 3            |
+-----+-----+-----+
9 rows in set (0.00 sec)
```

31. SELECT name, birth

FROM pet

WHERE month(birth) = month(date\_add(curdate(), interval 3 month));

```
mysql> SELECT name, birth FROM pet WHERE month(birth) = month(date_add(curdate(), interval 3 month));
+-----+-----+
| name | birth      |
+-----+-----+
| Slim | 2011-04-29 |
+-----+-----+
1 row in set (0.00 sec)
```

32. SELECT \* FROM pet

WHERE name like 'b%';

```
mysql> SELECT * FROM pet WHERE name like 'b%';
+-----+-----+-----+-----+-----+-----+
| name  | owner  | species | sex  | birth      | death      |
+-----+-----+-----+-----+-----+-----+
| Buffy | Harold | dog     | f    | 2004-05-13 | NULL       |
| Bowser | Diane | dog     | m    | 2006-08-31 | 2010-07-29 |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

33. SELECT owner, count(\*)

FROM pet

GROUP BY owner;

```
mysql> SELECT owner, count(*) FROM pet GROUP BY owner;
+-----+-----+
| owner  | count(*) |
+-----+-----+
| Benny  | 2        |
| Diane  | 2        |
| Gwen   | 3        |
| Harold | 2        |
+-----+-----+
4 rows in set (0.00 sec)
```

34. SELECT species, sex, count(\*)

FROM pet

GROUP BY species, sex;

```
mysql> SELECT species, sex, count(*) FROM pet
-> GROUP BY species, sex;
+-----+-----+-----+
| species | sex | count(*) |
+-----+-----+-----+
| bird    |    |         1 |
| bird    | f   |         1 |
| cat     | f   |         1 |
| cat     | m   |         1 |
| dog     | f   |         1 |
| dog     | m   |         2 |
| hamster | f   |         1 |
| snake   | m   |         1 |
+-----+-----+-----+
8 rows in set (0.00 sec)
```