Due Date: Oct 21, 2015 11:00 PM (Late date Oct 22, 11:00 pm) Points: 35 point max

General Directions

This assignment uses the tables from the vets database.
The goal of the assignment is to work with aggregates and groupings.
The sample displays do not always display the data from our tables but you need to use them for column aliases and how to handle nulls.
.

Tasks

Task 01: Display the number of exams and the total fees charged for all exams for animal id 16003.
Then repeat this query for animal 21205.

```
NumberOfExams  TotalFees
------------- ----------
           12     678.25
```

Task 02: Display the number of exams for all rodents that were done in the previous year.

```
NumberOfExams
-------------
           18
```

Task 03: For every client in the clients table, display the client ID, last name, the number of animals they have and the number of rodents they have. Sort by the client id.

```
Client ID Client Name     Number of Animals Number of Rodents
---------- --------------- ----------------- -----------------
       411 Carter                          5                 0
      1825 Harris                          3                 3
      1852 Dalrymple                       8                 0
      1967 Dixon                           0                 0
```

Task 04: Display the number of exams that were performed in the previous quarter and the number of animal with an exam in the previous quarter. An animal that had more than one exam in that time period counts as a single animal. This query produces a single row with two columns.
The term "previous quarter " means any date in the quarter before the current quarter. If you run the query in Aug 2015, that is the third quarter of 2015. The query will return data for the second quarter of 2015. If you run the query in Feb 2016, that is the first quarter of 2016, the query will return data for the fourth quarter of 2015. A quarter is a three month span starting with Jan. Jan, Feb, Mar are the first quarter; Apr, May, Jun are the second quarter; Jul, Aug, Sep are the third quarter; Oct, Nov, Dec are the fourth quarter.

```
Number of Exams Number of Animals with Exams
--------------- ----------------------------
             78                           62
```

Task 05: Display the client id and last name of the clients who has the highest total exam fees for all of their animals. Consider there might be ties for first place - in that case, all tied clients should be returned.

```
  CL_ID CL_NAME_LAST
------- ---------------
   1234 Coltrane
```

Task 06: Use the cross tab techniques described in the notes for this task.
We want to know how many animals we have in the animals table in each of the indicated categories. We also want a count for all animals. This query has a single output row.

```
      Cats       Dogs    Rodents   Reptiles All Animals
---------- ---------- ---------- ---------- -----------
        22         98         24         45         312
```

Task 07: Display the client' s id and last name for all clients who have only one animal.

```
  CL_ID CL_NAME_LAST
------- ----------------
   1234 Coltrane
```

Task 08: For each animal that we have in the animals table, list the animal id, type, and name and the date of the most recent exam for that animal.
If the animal has no exams, then display "No Exams' in the column for the exam date.
Order by the animal id

```
  AnimalID AN_TYPE         AN_NAME         MostRecent
---------- --------------- --------------- ----------
     10002 cat             Gutsy           No Exams
     11025 bird            no name         No Exams
     15001 chelonian       Big Mike        2015/01/31
     15002 chelonian       George          2015/08/10
     15165 dog             Burgess         No Exams
     15401 lizard          Pinkie          2014/11/06
```

Task 09: The vets needs to make more money this year. Find all the animals with a total fees of more than $150 but the animal has no exam this year. Display the animal id, type and name and the cl_id and phone number.

```
  AN_ID AN_TYPE         AN_NAME          CL_ID CL_PHONE
------- --------------- --------------- ------- ------------
  17002 porcupine       Fritzchen          5699 415.239.6875
  21005 dormouse        Koshka             1825
```

You can add these command to the script to get the column widths narrower

```
column an_name format a15;
column an_type format a15;
column cl_id format  999999;
column an_id format  999999;
```