

# MySQL\_Exercise\_01\_Looking\_at\_Your\_Data-Copy1

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## 1 MySQL Exercise 1: Welcome to your first notebook!

Database interfaces vary greatly across platforms and companies. The interface you will be using here, called Jupyter, is a web application designed for data science teams who need to create and share documents that share live code. We will be taking advantage of Jupyter's ability to integrate instructional text with areas that allow you to write and run SQL queries. In this course, you will practice writing queries about the Dognition data set in these Jupyter notebooks .

Jupyter runs in a language called Python, so some of the commands you will run in these MySQL exercises will require incorporating small amounts of Python code, along with the MySQL query itself. Python is a very popular programming language with many statistical and visualization libraries, so you will likely encounter it in other business analysis settings.

### 1.0.1 Loading the sql

```
[1]: %load_ext sql
```

### 1.0.2 Connecting to the Database

```
[2]: %sql mysql://studentuser:studentpw@localhost/dognitiondb
```

### 1.0.3 To make this the default database for our queries, run this “USE” command:

```
[3]: %sql USE dognitiondb
```

```
* mysql://studentuser:***@localhost/dognitiondb  
0 rows affected.
```

```
[3]: []
```

We are now ready to run queries in the Dognition database!

## 1.1 get to know your data

```
[5]: %sql SHOW tables
```

```
* mysql://studentuser:***@localhost/dognitiondb  
6 rows affected.
```

```
[5]: [('complete_tests',),  
      ('dogs',),  
      ('exam_answers',),  
      ('reviews',),  
      ('site_activities',),  
      ('users',)]
```

**Question 1:** How many columns does the “dogs” table have? Enter the appropriate query below to find out:

```
[13]: %sql SHOW columns FROM dogs
```

```
* mysql://studentuser:***@localhost/dognitiondb  
21 rows affected.
```

```
[13]: [('gender', 'varchar(255)', 'YES', '', None, ''),  
      ('birthday', 'varchar(255)', 'YES', '', None, ''),  
      ('breed', 'varchar(255)', 'YES', '', None, ''),  
      ('weight', 'int(11)', 'YES', '', None, ''),  
      ('dog_fixed', 'tinyint(1)', 'YES', '', None, ''),  
      ('dna_tested', 'tinyint(1)', 'YES', '', None, ''),  
      ('created_at', 'datetime', 'NO', '', None, ''),  
      ('updated_at', 'datetime', 'NO', '', None, ''),  
      ('dimension', 'varchar(255)', 'YES', '', None, ''),  
      ('exclude', 'tinyint(1)', 'YES', '', None, ''),  
      ('breed_type', 'varchar(255)', 'YES', '', None, ''),  
      ('breed_group', 'varchar(255)', 'YES', '', None, ''),  
      ('dog_guid', 'varchar(60)', 'YES', 'MUL', None, ''),  
      ('user_guid', 'varchar(60)', 'YES', 'MUL', None, ''),  
      ('total_tests_completed', 'varchar(255)', 'YES', '', None, ''),  
      ('mean_iti_days', 'varchar(255)', 'YES', '', None, ''),  
      ('mean_iti_minutes', 'varchar(255)', 'YES', '', None, ''),  
      ('median_iti_days', 'varchar(255)', 'YES', '', None, ''),  
      ('median_iti_minutes', 'varchar(255)', 'YES', '', None, ''),  
      ('time_diff_between_first_and_last_game_days', 'varchar(255)', 'YES', '', None, ''),  
      ('time_diff_between_first_and_last_game_minutes', 'varchar(255)', 'YES', '', None, '')]
```

**Question 2:** Try using the DESCRIBE function to learn how many columns are in the “reviews” table:

```
[16]: %sql Describe reviews
```

```
* mysql://studentuser:***@localhost/dognitiondb
7 rows affected.
```

```
[16]: [('rating', 'int(11)', 'YES', '', None, ''),
      ('created_at', 'datetime', 'NO', '', None, ''),
      ('updated_at', 'datetime', 'NO', '', None, ''),
      ('user_guid', 'varchar(60)', 'YES', 'MUL', None, ''),
      ('dog_guid', 'varchar(60)', 'YES', 'MUL', None, ''),
      ('subcategory_name', 'varchar(60)', 'YES', '', None, ''),
      ('test_name', 'varchar(60)', 'YES', '', None, '')]
```

**Questions 3-6:** In the cells below, examine the fields in the other 4 tables of the Dognition database:

```
[17]: %sql Describe complete_tests
```

```
* mysql://studentuser:***@localhost/dognitiondb
6 rows affected.
```

```
[17]: [('created_at', 'datetime', 'NO', '', None, ''),
      ('updated_at', 'datetime', 'NO', '', None, ''),
      ('user_guid', 'varchar(60)', 'YES', 'MUL', None, ''),
      ('dog_guid', 'varchar(60)', 'YES', 'MUL', None, ''),
      ('test_name', 'varchar(60)', 'YES', '', None, ''),
      ('subcategory_name', 'varchar(60)', 'YES', '', None, '')]
```

```
[18]: %sql Describe exam_answers
```

```
* mysql://studentuser:***@localhost/dognitiondb
8 rows affected.
```

```
[18]: [('script_detail_id', 'int(11)', 'YES', '', None, ''),
      ('subcategory_name', 'varchar(255)', 'YES', '', None, ''),
      ('test_name', 'varchar(255)', 'YES', '', None, ''),
      ('step_type', 'varchar(255)', 'YES', '', None, ''),
      ('start_time', 'datetime', 'YES', '', None, ''),
      ('end_time', 'datetime', 'YES', '', None, ''),
      ('loop_number', 'int(11)', 'YES', '', None, ''),
      ('dog_guid', 'varchar(60)', 'YES', '', None, '')]
```

```
[19]: %sql Describe site_activities
```

```
* mysql://studentuser:***@localhost/dognitiondb
11 rows affected.
```

```
[19]: [('activity_type', 'varchar(150)', 'YES', 'MUL', None, ''),
      ('description', 'text', 'YES', '', None, ''),
      ('membership_id', 'int(11)', 'YES', '', None, ''),
      ('category_id', 'int(11)', 'YES', '', None, ''),
      ('script_id', 'int(11)', 'YES', '', None, ''),
      ('created_at', 'datetime', 'NO', '', None, ''),
      ('updated_at', 'datetime', 'NO', '', None, ''),
      ('user_guid', 'varchar(255)', 'YES', 'MUL', None, ''),
      ('script_detail_id', 'int(11)', 'YES', '', None, ''),
      ('test_name', 'varchar(255)', 'YES', '', None, ''),
      ('dog_guid', 'varchar(255)', 'YES', 'MUL', None, '')]
```

```
[20]: %sql Describe users
```

```
* mysql://studentuser:***@localhost/dognitiondb
16 rows affected.
```

```
[20]: [('sign_in_count', 'int(11)', 'YES', '', '0', ''),
      ('created_at', 'datetime', 'NO', '', None, ''),
      ('updated_at', 'datetime', 'NO', '', None, ''),
      ('max_dogs', 'int(11)', 'YES', '', '0', ''),
      ('membership_id', 'int(11)', 'YES', '', None, ''),
      ('subscribed', 'tinyint(1)', 'YES', '', '0', ''),
      ('exclude', 'tinyint(1)', 'YES', '', None, ''),
      ('free_start_user', 'tinyint(1)', 'YES', '', None, ''),
      ('last_active_at', 'datetime', 'YES', '', None, ''),
      ('membership_type', 'int(11)', 'YES', '', None, ''),
      ('user_guid', 'text', 'YES', 'MUL', None, ''),
      ('city', 'varchar(255)', 'YES', '', None, ''),
      ('state', 'varchar(255)', 'YES', '', None, ''),
      ('zip', 'varchar(255)', 'YES', '', None, ''),
      ('country', 'varchar(255)', 'YES', '', None, ''),
      ('utc_correction', 'varchar(255)', 'YES', '', None, '')]
```

### 1.1.1 Q: Get information breed of dogs

```
[21]: %%sql
      SELECT breed
      FROM dogs;
```

```
* mysql://studentuser:***@localhost/dognitiondb
35050 rows affected.
```

```
[21]: [('Labrador Retriever',),
      ('Shetland Sheepdog',),
      ('Golden Retriever',),
```

('Golden Retriever',),  
('Shih Tzu',),  
('Siberian Husky',),  
('Shih Tzu',),  
('Mixed',),  
('Labrador Retriever',),  
('Shih Tzu-Poodle Mix',),  
('German Shepherd Dog-Pembroke Welsh Corgi Mix',),  
('Vizsla',),  
('Pug',),  
('Boxer',),  
('German Shepherd Dog-Nova Scotia Duck Tolling Retriever Mix',),  
('Beagle',),  
('Beagle',),  
('Beagle',),  
('Mixed',),  
('Chesapeake Bay Retriever',),  
('Border Collie',),  
('Belgian Malinois',),  
('Australian Shepherd-German Shepherd Dog Mix',),  
('Poodle',),  
('Poodle',),  
('Golden Doodle',),  
('Labrador Retriever',),  
('German Shepherd Dog',),  
('German Shepherd Dog',),  
('Weimaraner',),  
('Mixed',),  
('Bouvier des Flandres',),  
('Mixed',),  
('German Shepherd Dog',),  
('Beagle',),  
('Mudi',),  
('Parson Russell Terrier-Beagle Mix',),  
('Dalmatian',),  
("I Don't Know",),  
('Border Collie-Labrador Retriever Mix',),  
('Belgian Tervuren',),  
('Mixed',),  
('Labrador Retriever',),  
('Shih Tzu',),  
('Australian Terrier',),  
('Shih Tzu',),  
('Golden Retriever',),  
('Bernese Mountain Dog',),  
('Chihuahua- Mix',),  
('Shetland Sheepdog',),

('Shetland Sheepdog',),  
('Mixed',),  
('Chihuahua-Dachshund Mix',),  
('Finnish Spitz',),  
('Siberian Husky',),  
('Rottweiler',),  
('Pembroke Welsh Corgi',),  
('Brussels Griffon',),  
('Mixed',),  
('French Bulldog',),  
('French Bulldog',),  
('Shih Tzu',),  
('Doberman Pinscher',),  
('German Shepherd Dog',),  
('Pembroke Welsh Corgi',),  
('English Cocker Spaniel-Cocker Spaniel Mix',),  
('Rottweiler',),  
('German Shepherd Dog',),  
('Cavalier King Charles Spaniel-Bichon Frise Mix',),  
('Shih Tzu',),  
('Bedlington Terrier',),  
('Labrador Retriever',),  
('Russell Terrier',),  
('Poodle',),  
('Irish Setter',),  
('German Shepherd Dog',),  
('Irish Setter',),  
('Poodle',),  
('Irish Red and White Setter',),  
('Poodle-Cocker Spaniel Mix',),  
('American Pit Bull Terrier',),  
('Golden Retriever',),  
('Beagle-Schipperke Mix',),  
('Greyhound',),  
('Labrador Retriever-Golden Retriever Mix',),  
('Labrador Retriever-Golden Retriever Mix',),  
('Labrador Retriever',),  
('Boston Terrier-Chihuahua Mix',),  
('American Pit Bull Terrier',),  
('Mixed',),  
('Beagle-Cavalier King Charles Spaniel Mix',),  
('Boxer',),  
('Pug',),  
('French Bulldog',),  
('Mixed',),  
('Mixed',),  
('Labradoodle',),

('Mixed',),  
 ('Pembroke Welsh Corgi',),  
 ('Golden Retriever',),  
 ('Cocker Spaniel',),  
 ('Mixed',),  
 ('Rottweiler',),  
 ('Labrador Retriever-Border Collie Mix',),  
 ('Lhasa Apso-Poodle Mix',),  
 ('Labradoodle',),  
 ('English Springer Spaniel',),  
 ('English Springer Spaniel',),  
 ('Mixed',),  
 ('Shih Tzu',),  
 ('Neapolitan Mastiff',),  
 ('Rat Terrier',),  
 ('Border Terrier',),  
 ('Collie-Shetland Sheepdog Mix',),  
 ('German Shepherd Dog',),  
 ('Dachshund',),  
 ('Dachshund',),  
 ('Golden Retriever-Collie Mix',),  
 ('Beagle',),  
 ('Labrador Retriever',),  
 ('American Eskimo Dog-Papillon Mix',),  
 ('Papillon',),  
 ('Pomeranian',),  
 ('German Shepherd Dog-Belgian Tervuren Mix',),  
 ('German Shepherd Dog',),  
 ('Maltese-Yorkshire Terrier Mix',),  
 ('Australian Shepherd',),  
 ('Shiba Inu',),  
 ('Rat Terrier',),  
 ('Poodle',),  
 ('Border Collie-Greyhound Mix',),  
 ('Poodle',),  
 ('Labradoodle',),  
 ('Mixed',),  
 ('Maltese-Poodle Mix',),  
 ('Siberian Husky-German Shepherd Dog Mix',),  
 ('Chihuahua',),  
 ('Golden Retriever-German Shepherd Dog Mix',),  
 ('Parson Russell Terrier',),  
 ('Rhodesian Ridgeback',),  
 ('Mixed',),  
 ('Mixed',),  
 ('Chihuahua',),  
 ('West Highland White Terrier',),

('Poodle-Miniature Schnauzer Mix',),  
 ('Maltese-Poodle Mix',),  
 ('Yorkshire Terrier-Poodle Mix',),  
 ('Vizsla',),  
 ('Golden Retriever',),  
 ('Labradoodle',),  
 ('Silky Terrier-Poodle Mix',),  
 ('Mixed',),  
 ('Russell Terrier-Miniature Pinscher Mix',),  
 ('Mixed',),  
 ('Bernese Mountain Dog',),  
 ('Bernese Mountain Dog',),  
 ('Bernese Mountain Dog',),  
 ('Yorkshire Terrier',),  
 ('Australian Cattle Dog- Mix',),  
 ('Mixed',),  
 ('Flat-Coated Retriever',),  
 ('Staffordshire Bull Terrier-Bulldog Mix',),  
 ('Mixed',),  
 ('Mixed',),  
 ('Kooikerhondje',),  
 ('German Shepherd Dog',),  
 ('Labrador Retriever-Golden Retriever Mix',),  
 ('German Shepherd Dog-Border Collie Mix',),  
 ('Mixed',),  
 ('Golden Retriever',),  
 ('Mixed',),  
 ('German Shepherd Dog',),  
 ('Mixed',),  
 ('Labradoodle',),  
 ('Shih Tzu',),  
 ('American Staffordshire Terrier',),  
 ('Bulldog',),  
 ('Mixed',),  
 ('Labrador Retriever',),  
 ('Beagle',),  
 ('Beagle',),  
 ('Cardigan Welsh Corgi-German Shepherd Dog Mix',),  
 ('German Shepherd Dog',),  
 ('Doberman Pinscher',),  
 ('Doberman Pinscher-German Shepherd Dog Mix',),  
 ('Mixed',),  
 ('Shetland Sheepdog',),  
 ('Canaan Dog- Mix',),  
 ('Beagle',),  
 ('Rhodesian Ridgeback',),  
 ('Miniature Schnauzer',),



('Russell Terrier-Pug Mix',),  
('Mixed',),  
('Australian Cattle Dog-Border Collie Mix',),  
('Mixed',),  
('Shih Tzu',),  
('Shih Tzu',),  
('English Cocker Spaniel',),  
('Australian Shepherd',),  
('Parson Russell Terrier',),  
('Boxer',),  
('German Shepherd Dog',),  
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('Australian Cattle Dog',),  
('Border Collie-Australian Shepherd Mix',),  
('Shih Tzu',),  
('Miniature Schnauzer',),  
('Australian Shepherd-Border Collie Mix',),  
('Mixed',),  
('Poodle',),  
('Labrador Retriever',),  
('Mixed',),  
('French Spaniel',),  
('Mixed',),  
('Italian Greyhound',),  
('Weimaraner',),  
('Leonberger',),  
('Poodle',),  
('German Shepherd Dog',),  
('Mixed',),  
('Portuguese Water Dog',),  
('Boykin Spaniel',),  
('Mixed',),  
('Labrador Retriever',),  
('Soft Coated Wheaten Terrier',),  
('Poodle',),  
('Mixed',),  
('Mixed',),  
('German Shepherd Dog',),  
('Bulldog',),  
('Golden Retriever',),  
('Boston Terrier',),  
('Shih Tzu',),  
('Brittany',),  
('Bernese Mountain Dog',),  
('Golden Retriever-Labrador Retriever Mix',),  
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('Labrador Retriever-Chinese Shar-Pei Mix',),  
('Labrador Retriever',),  
('Nova Scotia Duck Tolling Retriever',),  
('Nova Scotia Duck Tolling Retriever',),  
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('Labrador Retriever',),  
('Australian Shepherd',),  
('Mixed',),  
('Siberian Husky',),  
('Mixed',),  
('Mixed',),  
('Lhasa Apso',),  
('Australian Shepherd',),  
('Mixed',),  
('Mixed',),  
('Mixed',),  
('Labrador Retriever',),  
('Mixed',),  
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('Keeshond',),  
('Bull Terrier',),  
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('Boston Terrier',),  
('German Shepherd Dog',),  
('Poodle',),  
('German Shepherd Dog',),  
('Shih Tzu-Maltese Mix',),  
('Labrador Retriever',),  
('Chesapeake Bay Retriever',),  
('Mixed',),  
('Shih Tzu',),  
('Cocker Spaniel',),  
('Labrador Retriever',),  
('Maltese',),  
('Mixed',),  
('Cockapoo',),  
('Chihuahua-Miniature Pinscher Mix',),  
('German Shepherd Dog',),  
('Mixed',),  
('Shih Tzu',),  
('Shih Tzu',),  
('Australian Cattle Dog',),  
('Maltese-Poodle Mix',),

('Maltese-Shih Tzu Mix',),  
('Mixed',),  
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('Mixed',),  
('Miniature American Shepherd',),  
('Mixed',),  
('Mixed',),  
('Golden Retriever',),  
('Parson Russell Terrier',),  
('Border Collie',),  
('German Shepherd Dog',),  
('Labrador Retriever-Australian Cattle Dog Mix',),  
('Poodle',),  
('Shih Tzu',),  
('Shih Tzu',),  
('Mixed',),  
('Mixed',),  
('I Don't Know',),  
('Border Collie',),  
('Golden Retriever',),  
('Mixed',),  
('Mixed',),  
('Chihuahua',),  
('Australian Shepherd',),  
('Poodle',),  
('Affenpinscher',),  
('Keeshond',),  
('Chihuahua',),  
('English Setter',),  
('Miniature Schnauzer-Poodle Mix',),  
('Mixed',),  
('Havanese',),  
('German Shepherd Dog',),  
('Australian Shepherd',),  
('Mixed',),  
('Border Collie',),  
('Boxer',),  
('Labrador Retriever-Cane Corso Mix',),  
('Labrador Retriever',),  
('Miniature Schnauzer',),  
('Mixed',),  
('Mixed',),  
('Bichon Frise-Shih Tzu Mix',),  
('Pug',),  
('Pointer-Labrador Retriever Mix',),  
('Labrador Retriever-Basenji Mix',),

('Poodle',),  
('Golden Retriever',),  
('Australian Cattle Dog',),  
('German Shepherd Dog',),  
('Mixed',),  
('Golden Doodle',),  
('Pembroke Welsh Corgi-Russell Terrier Mix',),  
('Mixed',),  
('Mixed',),  
('Labrador Retriever',),  
('Border Collie-Labrador Retriever Mix',),  
('Mixed',),  
('Bulldog-Beagle Mix',),  
('Border Collie',),  
('Bulldog',),  
('Mixed',),  
('Nova Scotia Duck Tolling Retriever',),  
('Mixed',),  
('Australian Shepherd',),  
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('Golden Retriever',),  
('Poodle-Maltese Mix',),  
('Great Dane-Labrador Retriever Mix',),  
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('Boxer',),  
('Bernese Mountain Dog',),  
('Havanese',),  
('Mixed',),  
('Boxer',),  
('Mixed',),  
('Brittany-Poodle Mix',),  
('Shih Tzu',),  
('Mixed',),  
('Scottish Terrier',),  
('Mixed',),  
('Mixed',),  
('Weimaraner',),  
('Shih Tzu',),  
('Weimaraner',),  
('Mixed',),  
('West Highland White Terrier',),  
('Labradoodle',),  
('Labrador Retriever',),  
('Mixed',),  
('Beagle',),  
('Labrador Retriever-Cardigan Welsh Corgi Mix',),

('Mixed',),  
 ('Mixed',),  
 ('Mixed',),  
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 ('Shih Tzu',),  
 ('Australian Shepherd',),  
 ('Beagle',),  
 ('Beagle',),  
 ('German Shepherd Dog',),  
 ("I Don't Know",),  
 ('Mixed',),  
 ('Miniature American Shepherd',),  
 ('Great Dane',),  
 ('Golden Retriever',),  
 ('Golden Retriever-Labrador Retriever Mix',),  
 ('Labrador Retriever',),  
 ('Mixed',),  
 ('Icelandic Sheepdog',),  
 ('Golden Retriever',),  
 ('Dachshund',),  
 ('German Shorthaired Pointer-Labrador Retriever Mix',),  
 ('Miniature Schnauzer',),  
 ('Miniature Schnauzer',),  
 ('Pug-Chihuahua Mix',),  
 ('Cockapoo',),  
 ('Mixed',),  
 ('Weimaraner',),  
 ('Yorkshire Terrier-Bichon Frise Mix',),  
 ('Cockapoo',),  
 ('Border Collie',),  
 ('Golden Retriever',),  
 ('Cairn Terrier',),  
 ('Yorkshire Terrier- Mix',),  
 ('German Shepherd Dog',),  
 ('Belgian Sheepdog- Mix',),  
 ('Australian Cattle Dog-Border Collie Mix',),  
 ('Old English Sheepdog',),  
 ('West Highland White Terrier',),  
 ('Golden Retriever',),  
 ('Mixed',),  
 ('Mixed',),  
 ('Miniature Schnauzer',),  
 ('Mixed',),  
 ('Boston Terrier',),  
 ('Portuguese Water Dog',),  
 ('American Pit Bull Terrier-American Staffordshire Terrier Mix',),  
 ('American Pit Bull Terrier-American Staffordshire Terrier Mix',),

('Labrador Retriever',),  
 ('Golden Retriever',),  
 ('Golden Retriever',),  
 ('Danish-Swedish Farmdog',),  
 ('Golden Retriever',),  
 ('Labrador Retriever',),  
 ('Mixed',),  
 ('Cardigan Welsh Corgi',),  
 ('Bernese Mountain Dog',),  
 ('Boxer',),  
 ('Boxer',),  
 ('Poodle',),  
 ('Mixed',),  
 ('Labradoodle',),  
 ('Mixed',),  
 ('Labradoodle',),  
 ('Mixed',),  
 ('Shetland Sheepdog',),  
 ('Shetland Sheepdog',),  
 ('Cavalier King Charles Spaniel',),  
 ('Beagle',),  
 ('Bichon Frise-Cavalier King Charles Spaniel Mix',),  
 ('Golden Doodle',),  
 ('Labrador Retriever',),  
 ('French Bulldog',),  
 ('Cockapoo',),  
 ('Rhodesian Ridgeback-Boxer Mix',),  
 ('Mixed',),  
 ('Poodle-Cavalier King Charles Spaniel Mix',),  
 ('Poodle-Cavalier King Charles Spaniel Mix',),  
 ('Mixed',),  
 ('Beagle-Australian Cattle Dog Mix',),  
 ('Mixed',),  
 ('Mixed',),  
 ('Shetland Sheepdog',),  
 ('Labrador Retriever-Rottweiler Mix',),  
 ('Pomeranian',),  
 ('Poodle',),  
 ('Mixed',),  
 ('Yorkshire Terrier',),  
 ('Shih Tzu',),  
 ('Mixed',),  
 ('Border Collie',),  
 ('Mixed',),  
 ('Dalmatian',),  
 ('Chow Chow-Golden Retriever Mix',),  
 ('German Shepherd Dog-Beagle Mix',),

('Siberian Husky',),  
('Other',),  
('American Staffordshire Terrier-Labrador Retriever Mix',),  
('Yorkshire Terrier',),  
('Cockapoo',),  
('Affenpinscher',),  
('Maltese',),  
('Mixed',),  
('Border Terrier- Mix',),  
('Scottish Terrier',),  
('English Setter',),  
('Labrador Retriever',),  
('Mixed',),  
('Mixed',),  
('Other',),  
('Havanese',),  
('Havanese',),  
('Havanese',),  
('Border Terrier',),  
('Border Terrier',),  
('Border Terrier',),  
('Australian Shepherd',),  
('Bulldog',),  
('Coton de Tulear',),  
('Cardigan Welsh Corgi',),  
('Mixed',),  
('Mixed',),  
('Russell Terrier',),  
('Greyhound',),  
('American Water Spaniel',),  
('Mixed',),  
('German Shepherd Dog',),  
('Russell Terrier-Chihuahua Mix',),  
('Labrador Retriever',),  
('Poodle',),  
('Cavalier King Charles Spaniel',),  
('Mastiff',),  
('Cavalier King Charles Spaniel',),  
('Mixed',),  
('I Don't Know',),  
('Shiba Inu',),  
('Golden Retriever',),  
('Mixed',),  
('Mixed',),  
('Border Collie',),  
('Beagle',),  
('Mixed',),

('German Shepherd Dog',),  
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('Pekingese-Dachshund Mix',),  
('German Shepherd Dog-Siberian Husky Mix',),  
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('Rat Terrier',),  
('Chihuahua',),  
('Portuguese Water Dog',),  
('Rottweiler- Mix',),  
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('Mixed',),  
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('Whippet',),  
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('Boston Terrier-Bulldog Mix',),  
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('Mixed',),  
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('Border Collie-Dalmatian Mix',),



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 ('German Shepherd Dog',),  
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 ('Mixed',),  
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 ('Golden Retriever',),  
 ('Staffordshire Bull Terrier',),  
 ('Australian Shepherd',),  
 ('Havanese',),  
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 ('Mixed',),  
 ('Poodle',),  
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 ('Other',),  
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('Golden Retriever-Newfoundland Mix',),  
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 ('French Spaniel',),  
 ('Samoyed',),  
 ('Coton de Tulear',),  
 ('Mixed',),  
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 ('Collie',),  
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 ('Shih Tzu',),  
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 ('Mixed',),  
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 ('Greyhound',),  
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 ('Mixed',),  
 ('Cockapoo',),  
 ('Beagle- Mix',),  
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 ('Havanese',),  
 ('Golden Retriever',),

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('Shih Tzu',),  
('Mixed',),  
('Shih Tzu',),  
('Havanese',),  
('Yorkshire Terrier',),  
('Dalmatian',),  
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('Mixed',),  
('Rhodesian Ridgeback',),  
('Labradoodle',),  
('Australian Shepherd',),  
('Australian Shepherd',),  
('Dalmatian',),  
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("I Don't Know",),  
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('Boston Terrier',),  
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('Mixed',),  
('Pomeranian',),  
('Whippet',),  
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('Greyhound',),  
('Pug-Wire Fox Terrier Mix',),  
('Pug-Smooth Fox Terrier Mix',),  
('Pembroke Welsh Corgi',),  
('Australian Shepherd',),  
('German Shepherd Dog',),  
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('Shih Tzu',),  
('Wire Fox Terrier',),  
('Mixed',),  
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('Mixed',),  
('Puggle',),  
('Shih Tzu',),  
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('Mixed',),  
('Pug-Chihuahua Mix',),  
('Mixed',),  
('Coton de Tulear',),  
('Golden Retriever',),  
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('Shih Tzu',),  
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('Miniature Pinscher',),  
('English Springer Spaniel',),  
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('Catahoula Leopard Dog-Rottweiler Mix',),  
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('Greyhound',),  
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 ('Boxer-Border Collie Mix',),  
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 ('Mastiff',),  
 ('French Bulldog',),  
 ('Australian Shepherd',),  
 ('Australian Shepherd',),  
 ('Australian Shepherd',),  
 ('Dachshund',),  
 ("I Don't Know",),  
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 ('Maltese',),  
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 ('Border Collie',),  
 ('Lhasa Apso',),  
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 ('Belgian Malinois',),  
 ('Greyhound',),  
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 ('Golden Retriever',),

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 ('Bulldog',),  
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 ('American Staffordshire Terrier-Catahoula Leopard Dog Mix',),  
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 ('German Shepherd Dog',),  
 ('Scottish Terrier',),  
 ('Bulldog',),  
 ('Shih Tzu-Pekingese Mix',),  
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 ('Rat Terrier',),  
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 ('Poodle',),  
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 ('Boxer',),  
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 ('Dachshund-Beagle Mix',),  
 ('Silky Terrier',),  
 ('Shetland Sheepdog',),  
 ('Mixed',),  
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 ('Scottish Terrier',),  
 ('-German Shepherd Dog Mix',),  
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 ('Keeshond',),  
 ('Mixed',),  
 ('Mixed',),  
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 ('Coton de Tulear',),  
 ('Golden Retriever',),  
 ('Mixed',),  
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 ('Chihuahua',),  
 ('Poodle',),  
 ('American Pit Bull Terrier',),  
 ('Bernese Mountain Dog',),  
 ('Golden Retriever',),  
 ('Mixed',),  
 ('Mixed',),

('German Shepherd Dog-Chow Chow Mix',),  
 ('Labrador Retriever-Golden Retriever Mix',),  
 ('Weimaraner',),  
 ('Mixed',),  
 ('German Shepherd Dog',),  
 ('Border Collie-Australian Shepherd Mix',),  
 ('Labrador Retriever- Mix',),  
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 ('Mixed',),  
 ('Pembroke Welsh Corgi-Great Pyrenees Mix',),  
 ('Mixed',),  
 ('Golden Retriever',),  
 ('Golden Retriever',),  
 ('Mixed',),  
 ('German Shepherd Dog',),  
 ('Australian Shepherd-Pembroke Welsh Corgi Mix',),  
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 ('German Shepherd Dog',),  
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 ('Cavalier King Charles Spaniel',),  
 ('Australian Shepherd',),  
 ('French Bulldog',),  
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 ('Poodle',),  
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 ('Labrador Retriever',),  
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 ('Labradoodle',),  
 ('Cavalier King Charles Spaniel',),  
 ('Mixed',),  
 ('Mixed',),  
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('Dachshund',),  
('Shorkie',),  
('Field Spaniel',),  
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('Cavalier King Charles Spaniel',),  
('Poodle',),  
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('Yorkshire Terrier',),  
('Australian Cattle Dog',),  
('Other',),  
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('Boxer',),  
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('Pug',),  
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('Pug-Miniature Pinscher Mix',),  
('Shetland Sheepdog',),  
('Whippet-Chinese Shar-Pei Mix',),  
('German Shepherd Dog',),  
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('Portuguese Water Dog',),  
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('Labradoodle',),  
('Papillon',),  
('Poodle',),  
('Mixed',),  
('Poodle',),  
('Portuguese Water Dog',),  
('Vizsla- Mix',),  
('Boxer',),  
('Chow Chow-Labrador Retriever Mix',),  
('Rat Terrier',),  
('Rhodesian Ridgeback-Boxer Mix',),  
('Labrador Retriever',),

```
( 'Mixed', ),
( 'Border Collie-Whippet Mix', ),
( 'Mixed', ),
( 'Russell Terrier', ),
( 'Other', ),
( 'Belgian Malinois', ),
( 'German Shepherd Dog', ),
( 'Border Collie-Pembroke Welsh Corgi Mix', ),
( 'Mixed', ),
( 'Pug', ),
...]
```

## 1.2 Using LIMIT to restrict the number of rows in your output (and prevent system crashes)

**Question 7:** In the next cell, try entering a query that will let you see the first 10 rows of the breed column in the dogs table.

```
[34]: %sql SELECT breed FROM dogs LIMIT 10;
```

```
* mysql://studentuser:***@localhost/dognitiondb
10 rows affected.
```

```
[34]: [( 'Labrador Retriever', ),
( 'Shetland Sheepdog', ),
( 'Golden Retriever', ),
( 'Golden Retriever', ),
( 'Shih Tzu', ),
( 'Siberian Husky', ),
( 'Shih Tzu', ),
( 'Mixed', ),
( 'Labrador Retriever', ),
( 'Shih Tzu-Poodle Mix', )]
```

We can also select rows of data from different parts of the output table, rather than always just starting at the beginning. To do this, use the OFFSET clause after LIMIT. The number after the OFFSET clause indicates from which row the output will begin querying. Note that the offset of Row 1 of a table is actually 0. Therefore, in the following query:

```
SELECT breed
FROM dogs LIMIT 10 OFFSET 5;
```

10 rows of data will be returned, starting at Row 6.

An alternative way to write the OFFSET clause in the query is:

```
SELECT breed
```

```
FROM dogs LIMIT 5, 10;
```

In this notation, the offset is the number before the comma, and the number of rows returned is the number after the comma.

### Try it yourself:

```
[35]: %%sql SELECT breed
      FROM dogs LIMIT 10 OFFSET 5;
```

```
* mysql://studentuser:***@localhost/dognitiondb
10 rows affected.
```

```
[35]: [('Siberian Husky',),
      ('Shih Tzu',),
      ('Mixed',),
      ('Labrador Retriever',),
      ('Shih Tzu-Poodle Mix',),
      ('German Shepherd Dog-Pembroke Welsh Corgi Mix',),
      ('Vizsla',),
      ('Pug',),
      ('Boxer',),
      ('German Shepherd Dog-Nova Scotia Duck Tolling Retriever Mix',)]
```

Try the following query with different orders of the column names to observe the differences in output (I will include a **LIMIT** statement in many of the examples I use in the rest of the course, but feel free to change or remove them to explore different aspects of the data):

```
SELECT breed, breed_type, breed_group
FROM dogs LIMIT 5, 10;
```

```
[37]: %%sql SELECT breed, breed_type, breed_group
      FROM dogs LIMIT 5, 10;
```

```
* mysql://studentuser:***@localhost/dognitiondb
10 rows affected.
```

```
[37]: [('Siberian Husky', 'Pure Breed', 'Working'),
      ('Shih Tzu', 'Pure Breed', 'Toy'),
      ('Mixed', "Mixed Breed/ Other/ I Don't Know", None),
      ('Labrador Retriever', 'Pure Breed', 'Sporting'),
      ('Shih Tzu-Poodle Mix', 'Cross Breed', None),
      ('German Shepherd Dog-Pembroke Welsh Corgi Mix', 'Cross Breed', None),
      ('Vizsla', 'Pure Breed', 'Sporting'),
      ('Pug', 'Pure Breed', 'Toy'),
      ('Boxer', 'Pure Breed', 'Working'),
      ('German Shepherd Dog-Nova Scotia Duck Tolling Retriever Mix', 'Cross Breed',
      None)]
```

Another trick to know about when using SELECT is that you can use an asterisk as a “wild card” to return all the data in a table. (A wild card is defined as a character that will represent or match any character or sequence of characters in a query.) Take note, this is very risky to do if you do not limit your output or if you don’t know how many data are in your database, so use the wild card with caution. However, it is a handy tool to use when you don’t have all the column names easily available or when you know you want to query an entire table.

““

#### Question 8: Try using the wild card to query the reviews table:

```
[38]: %%sql SELECT *
      FROM dogs LIMIT 5, 10;
```

```
* mysql://studentuser:***@localhost/dognitiondb
10 rows affected.
```

```
[38]: [('male', '2011', 'Siberian Husky', 60, 1, 0, datetime.datetime(2013, 2, 5, 18,
14, 14), datetime.datetime(2013, 7, 25, 19, 41, 49), 'stargazer', None, 'Pure
Breed', 'Working', 'fd27b948-7144-11e5-ba71-058fbc01cf0b',
'ce13615c-7144-11e5-ba71-058fbc01cf0b', '20', '0.1785873538', '257.16578947',
'0.0035648148035', '5.1333333171', '3.3931597222', '4886.15'),
('male', '1982', 'Shih Tzu', 190, 1, 0, datetime.datetime(2013, 2, 5, 18, 16,
24), datetime.datetime(2014, 5, 30, 15, 52, 54), 'maverick', 1, 'Pure Breed',
'Toy', 'fd27ba1a-7144-11e5-ba71-058fbc01cf0b',
'ce135e14-7144-11e5-ba71-058fbc01cf0b', '27', '6.1905898326', '8914.449359',
'0.00033564807185', '0.48333322347', '160.95533565', '231775.68333'),
('male', '2012', 'Mixed', 50, 1, 0, datetime.datetime(2013, 2, 5, 18, 44, 2),
datetime.datetime(2013, 7, 25, 19, 41, 49), 'protodog', None, "Mixed Breed/
Other/ I Don't Know", None, 'fd27bbbe-7144-11e5-ba71-058fbc01cf0b',
'ce135f2c-7144-11e5-ba71-058fbc01cf0b', '20', '0.0080750487303', '11.628070172',
'0.0046412037941', '6.6833334635', '0.15342592588', '220.93333326'),
('male', '2008', 'Labrador Retriever', 70, 1, 0, datetime.datetime(2013, 2, 5,
20, 59, 42), datetime.datetime(2013, 7, 25, 19, 41, 49), 'einstein', None, 'Pure
Breed', 'Sporting', 'fd27c1c2-7144-11e5-ba71-058fbc01cf0b',
'ce136a1c-7144-11e5-ba71-058fbc01cf0b', '20', '0.68410453216', '985.11052631',
'0.0033796295731', '4.8666665853', '12.997986111', '18717.1'),
('male', '2008', 'Shih Tzu-Poodle Mix', 0, 1, 0, datetime.datetime(2013, 2, 5,
21, 30, 14), datetime.datetime(2013, 7, 25, 19, 41, 49), 'socialite', None,
'Cross Breed', None, 'fd27c5be-7144-11e5-ba71-058fbc01cf0b',
'ce136ac6-7144-11e5-ba71-058fbc01cf0b', '20', '0.22328155458', '321.5254386',
'0.0038888889878', '5.6000001424', '4.2423495371', '6108.9833334'),
('female', '2011', 'German Shepherd Dog-Pembroke Welsh Corgi Mix', 40, 1, 0,
datetime.datetime(2013, 2, 5, 22, 29, 24), datetime.datetime(2013, 7, 25, 19,
41, 49), None, None, 'Cross Breed', None,
'fd27c74e-7144-11e5-ba71-058fbc01cf0b', 'ce136c24-7144-11e5-ba71-058fbc01cf0b',
'14', '25.69619391', '37002.519231', '0.0058449073678', '8.4166666097',
'334.05052083', '481032.75'),
('male', '2011', 'Vizsla', 60, 1, 0, datetime.datetime(2013, 2, 5, 23, 9, 37),
```

```
datetime.datetime(2013, 7, 25, 19, 41, 49), 'socialite', None, 'Pure Breed',
'Sporting', 'fd27c7d0-7144-11e5-ba71-058fbc01cf0b',
'ce136e36-7144-11e5-ba71-058fbc01cf0b', '20', '0.0053776803082', '7.7438596438',
'0.0044791667034', '6.4500000529', '0.10217592586', '147.13333323'),
('female', '2007', 'Pug', 20, 1, 0, datetime.datetime(2013, 2, 5, 23, 10, 40),
datetime.datetime(2013, 7, 31, 21, 57, 21), 'stargazer', None, 'Pure Breed',
'Toy', 'fd27c852-7144-11e5-ba71-058fbc01cf0b',
'ce136ee0-7144-11e5-ba71-058fbc01cf0b', '20', '0.051511939572', '74.177192984',
'0.0039930555499', '5.7499999919', '0.97872685187', '1409.3666667'),
('female', '2010', 'Boxer', 50, 1, 0, datetime.datetime(2013, 2, 5, 23, 27,
59), datetime.datetime(2013, 7, 25, 19, 41, 49), 'ace', None, 'Pure Breed',
'Working', 'fd27c8d4-7144-11e5-ba71-058fbc01cf0b',
'ce136f94-7144-11e5-ba71-058fbc01cf0b', '20', '0.15856725147', '228.33684211',
'0.0039351851456', '5.6666666097', '3.0127777779', '4338.4000001'),
('male', '2010', 'German Shepherd Dog-Nova Scotia Duck Tolling Retriever Mix',
30, 1, 0, datetime.datetime(2013, 2, 6, 0, 9, 33), datetime.datetime(2014, 5,
30, 15, 52, 56), None, None, 'Cross Breed', None,
'fd27c956-7144-11e5-ba71-058fbc01cf0b', 'ce134be0-7144-11e5-ba71-058fbc01cf0b',
'11', '2.8247997685', '4067.7116667', '0.0037731481142', '5.4333332845',
'28.247997685', '40677.116667'))]
```

**Question 9:** Go ahead and try it, adding in a column to your output that shows you the original median\_iti in minutes.

```
[39]: %%sql SELECT median_iti_minutes / 60
FROM dogs LIMIT 5, 10;
```

```
* mysql://studentuser:***@localhost/dognitiondb
10 rows affected.
```

```
[39]: [(0.085555555285,),
(0.0080555537245,),
(0.11138889105833334,),
(0.081111109755,),
(0.09333333570666666,),
(0.14027777682833334,),
(0.10750000088166667,),
(0.09583333319833334,),
(0.094444443495,),
(0.0905555474166667,)]
```

**Question 10:** How would you retrieve the first 15 rows of data from the dog\_guid, subcategory\_name, and test\_name fields of the Reviews table, in that order?

```
[42]: %%sql SELECT dog_guid,subcategory_name,test_name
FROM reviews LIMIT 10;
```

```
* mysql://studentuser:***@localhost/dognitiondb
```

10 rows affected.

```
[42]: [('ce3ac77e-7144-11e5-ba71-058fbc01cf0b', 'Empathy', 'Yawn Warm-up'),
      ('ce2aedcc-7144-11e5-ba71-058fbc01cf0b', 'Empathy', 'Eye Contact Warm-up'),
      ('ce2aedcc-7144-11e5-ba71-058fbc01cf0b', 'Empathy', 'Eye Contact Game'),
      ('ce2aedcc-7144-11e5-ba71-058fbc01cf0b', 'Communication', 'Treat Warm-up'),
      ('ce405c52-7144-11e5-ba71-058fbc01cf0b', 'Empathy', 'Yawn Warm-up'),
      ('ce405c52-7144-11e5-ba71-058fbc01cf0b', 'Empathy', 'Yawn Game'),
      ('ce405c52-7144-11e5-ba71-058fbc01cf0b', 'Empathy', 'Eye Contact Game'),
      ('ce405e28-7144-11e5-ba71-058fbc01cf0b', 'Communication', 'Treat Warm-up'),
      ('ce405e28-7144-11e5-ba71-058fbc01cf0b', 'Cunning', 'Turn Your Back'),
      ('ce2609c4-7144-11e5-ba71-058fbc01cf0b', 'Communication', 'Treat Warm-up')]
```

**Question 11:** How would you retrieve 10 rows of data from the `activity_type`, `created_at`, and `updated_at` fields of the `site_activities` table, starting at row 50? What do you notice about the `created_at` and `updated_at` fields?

```
[45]: %%sql SELECT activity_type,created_at,updated_at
      FROM site_activities LIMIT 10 OFFSET 50;
```

```
* mysql://studentuser:***@localhost/dognitiondb
10 rows affected.
```

```
[45]: [('point_in_cat', datetime.datetime(2013, 7, 25, 20, 55, 7),
      datetime.datetime(2013, 7, 25, 20, 55, 7)),
      ('point_in_cat', datetime.datetime(2013, 7, 25, 20, 55, 50),
      datetime.datetime(2013, 7, 25, 20, 55, 50)),
      ('point_in_cat', datetime.datetime(2013, 7, 25, 20, 56, 9),
      datetime.datetime(2013, 7, 25, 20, 56, 9)),
      ('point_in_cat', datetime.datetime(2013, 7, 25, 20, 56, 21),
      datetime.datetime(2013, 7, 25, 20, 56, 21)),
      ('point_in_cat', datetime.datetime(2013, 7, 25, 21, 0, 31),
      datetime.datetime(2013, 7, 25, 21, 0, 31)),
      ('point_in_cat', datetime.datetime(2013, 7, 25, 21, 2, 29),
      datetime.datetime(2013, 7, 25, 21, 2, 29)),
      ('point_in_cat', datetime.datetime(2013, 7, 25, 21, 2, 31),
      datetime.datetime(2013, 7, 25, 21, 2, 31)),
      ('point_in_cat', datetime.datetime(2013, 7, 25, 21, 2, 45),
      datetime.datetime(2013, 7, 25, 21, 2, 45)),
      ('point_in_cat', datetime.datetime(2013, 7, 25, 21, 5, 41),
      datetime.datetime(2013, 7, 25, 21, 5, 41)),
      ('point_in_cat', datetime.datetime(2013, 7, 25, 21, 7, 40),
      datetime.datetime(2013, 7, 25, 21, 7, 40))]
```

**Question 12:** How would you retrieve 20 rows of data from all the columns in the `users` table, starting from row 2000? What do you notice about the `free_start_user` field?

```
[46]: %%sql SELECT *
      FROM users LIMIT 20 OFFSET 2000;
```

```
* mysql://studentuser:***@localhost/dognitiondb
20 rows affected.
```

```
[46]: [(3, datetime.datetime(2013, 2, 21, 23, 25, 3), datetime.datetime(2015, 1, 28,
20, 51, 53), 1, 2, 1, None, None, None, 2,
'ce24589a-7144-11e5-ba71-058fbc01cf0b', None, None, None, None, None),
(1, datetime.datetime(2013, 2, 22, 1, 21, 20), datetime.datetime(2015, 1, 28,
20, 51, 53), 1, 1, 1, None, None, None, 1,
'ce245a3e-7144-11e5-ba71-058fbc01cf0b', None, None, None, None, None),
(1, datetime.datetime(2013, 2, 22, 3, 5, 42), datetime.datetime(2015, 1, 28,
20, 51, 53), 1, 2, 1, None, None, None, 2,
'ce245c50-7144-11e5-ba71-058fbc01cf0b', None, None, None, None, None),
(5, datetime.datetime(2013, 2, 22, 3, 29, 6), datetime.datetime(2015, 1, 28,
20, 51, 53), 1, 1, 1, None, None, datetime.datetime(2014, 6, 23, 23, 31, 28), 1,
'ce245d7c-7144-11e5-ba71-058fbc01cf0b', None, None, None, None, None),
(1, datetime.datetime(2013, 2, 22, 15, 5, 13), datetime.datetime(2015, 1, 28,
20, 51, 53), 1, 1, 1, None, None, None, 1,
'ce245eda-7144-11e5-ba71-058fbc01cf0b', None, None, None, None, None),
(1, datetime.datetime(2013, 2, 22, 16, 30, 17), datetime.datetime(2015, 1, 28,
20, 51, 53), 1, 2, 1, None, None, None, 2,
'ce245f98-7144-11e5-ba71-058fbc01cf0b', None, None, None, None, None),
(1, datetime.datetime(2013, 2, 22, 18, 16, 5), datetime.datetime(2015, 1, 28,
20, 51, 53), 1, 1, 0, None, None, None, 1,
'ce24611e-7144-11e5-ba71-058fbc01cf0b', None, None, None, None, None),
(3, datetime.datetime(2013, 2, 22, 20, 26, 53), datetime.datetime(2015, 1, 28,
20, 51, 53), 1, 1, 1, None, None, None, 1,
'ce24629a-7144-11e5-ba71-058fbc01cf0b', None, None, None, None, None),
(1, datetime.datetime(2013, 2, 22, 23, 14, 40), datetime.datetime(2015, 1, 28,
20, 51, 54), 2, 2, 1, None, None, None, 2,
'ce2465ec-7144-11e5-ba71-058fbc01cf0b', None, None, None, None, None),
(1, datetime.datetime(2013, 2, 23, 13, 5, 38), datetime.datetime(2015, 1, 28,
20, 51, 54), 1, 1, 1, None, None, None, 1,
'ce246772-7144-11e5-ba71-058fbc01cf0b', None, None, None, None, None),
(3, datetime.datetime(2013, 2, 23, 16, 56, 55), datetime.datetime(2015, 1, 28,
20, 51, 54), 2, 2, 1, None, None, None, 2,
'ce24688a-7144-11e5-ba71-058fbc01cf0b', None, None, None, None, None),
(3, datetime.datetime(2013, 2, 23, 21, 7, 41), datetime.datetime(2015, 1, 28,
20, 51, 54), 1, 2, 1, None, None, None, 2,
'ce246b28-7144-11e5-ba71-058fbc01cf0b', None, None, None, None, None),
(1, datetime.datetime(2013, 2, 23, 21, 22, 9), datetime.datetime(2015, 1, 28,
20, 51, 54), 1, 1, 1, None, None, None, 1,
'ce246b82-7144-11e5-ba71-058fbc01cf0b', None, None, None, None, None),
(4, datetime.datetime(2013, 2, 23, 22, 48, 15), datetime.datetime(2015, 1, 28,
20, 51, 54), 1, 2, 1, None, None, datetime.datetime(2014, 8, 4, 14, 16, 34), 2,
```

```
'ce246c40-7144-11e5-ba71-058fbc01cf0b', None, None, None, None, None),
(4, datetime.datetime(2013, 2, 24, 0, 14, 21), datetime.datetime(2015, 1, 28,
20, 51, 54), 2, 2, 0, None, None, None, 2,
'ce246dbc-7144-11e5-ba71-058fbc01cf0b', None, None, None, None, None),
(1, datetime.datetime(2013, 2, 24, 7, 34, 32), datetime.datetime(2015, 1, 28,
20, 51, 54), 1, 1, 0, None, None, None, 1,
'ce246e84-7144-11e5-ba71-058fbc01cf0b', None, None, None, None, None),
(1, datetime.datetime(2013, 2, 24, 14, 48, 43), datetime.datetime(2015, 1, 28,
20, 51, 54), 1, 1, 1, None, None, None, 1,
'ce246ff6-7144-11e5-ba71-058fbc01cf0b', None, None, None, None, None),
(1, datetime.datetime(2013, 2, 24, 15, 34, 10), datetime.datetime(2015, 1, 28,
20, 51, 54), 1, 1, 1, None, None, None, 1,
'ce247050-7144-11e5-ba71-058fbc01cf0b', None, None, None, None, None),
(1, datetime.datetime(2013, 2, 24, 15, 36, 19), datetime.datetime(2015, 1, 28,
20, 51, 54), 1, 1, 0, None, None, None, 1,
'ce2470aa-7144-11e5-ba71-058fbc01cf0b', None, None, None, None, None),
(2, datetime.datetime(2013, 2, 24, 16, 29, 34), datetime.datetime(2015, 1, 28,
20, 51, 54), 1, 1, 1, None, None, datetime.datetime(2014, 7, 5, 19, 59, 14), 1,
'ce2470fa-7144-11e5-ba71-058fbc01cf0b', None, None, None, None, None)]
```

### 1.3 You have already learned how to see all the data in your database! Congratulations!

Feel free to practice any other queries you are interested in below:

[ ]: