

### **MySQL Exercise 10: Answer Key**

#### **Question 1:**

```
%%sql
SELECT DISTINCT user_guid, country
FROM users
WHERE country IS NOT NULL;
```

#### **Question 2:**

```
%%sql
SELECT IF(cleaned_users.country='US','In US','Outside US') AS user_location,
count(cleaned_users.user_guid) AS num_guids
FROM (SELECT DISTINCT user_guid, country
      FROM users
      WHERE user_guid IS NOT NULL AND country IS NOT NULL) AS cleaned_users
GROUP BY user_location;
```

#### **Question 3:**

```
%%sql
SELECT dog_guid, dog_fixed,
      CASE dog_fixed
        WHEN "1" THEN "neutered"
        WHEN "0" THEN "not neutered"
      END AS neutered
FROM dogs
LIMIT 200;
```

#### **Question 4:**

```
%%sql
SELECT dog_guid, exclude,
      CASE exclude
        WHEN "1" THEN "exclude"
        ELSE "keep"
      END AS exclude_cleaned
FROM dogs
LIMIT 200;
```

#### **Question 5:**

```
%%sql
SELECT dog_guid, exclude, IF(exclude="1","exclude","keep") AS exclude_cleaned
FROM dogs
LIMIT 200;
```

#### **Question 6:**

```
%%sql SELECT
dog_guid, weight,
CASE
  WHEN weight<=0 THEN "very small"
  WHEN weight>10 AND weight<=30 THEN "small"
  WHEN weight>30 AND weight<=50 THEN "medium"
```

```

        WHEN weight>50 AND weight<=85 THEN "large"
        WHEN weight>85 THEN "very large"
    END AS weight_grouped
FROM dogs
LIMIT 200;

```

**Question 7:**

4871 unique dog\_guids in Group 1

**Question 8:**

3461 unique dog\_guids in Group 1

**Question 9:**

46 unique dog\_guids in Group 1

**Question 10:**

```

%%sql
SELECT d.dog_guid AS dogID, d.breed_type AS breed_type, count(c.created_at) AS
numtests,
    IF(d.breed_type='Pure Breed','pure_breed', 'not_pure_breed') AS pure_breed
FROM dogs d, complete_tests c
WHERE d.dog_guid=c.dog_guid
GROUP BY dogID, breed_type, pure_breed
LIMIT 50;

```

**\*\*Note that “breed\_type” and “pure\_breed” are technically optional in this query (above), since dogID should be unique.**

**Question 11:**

```

%%sql
SELECT COUNT(DISTINCT user_guid),
    CASE
        WHEN (state="NY" OR state="NJ") THEN "Group 1-NY/NJ"
        WHEN (state="NC" OR state="SC") THEN "Group 2-NC/SC"
        WHEN state="CA" THEN "Group 3-CA"
        ELSE "Group 4-Other"
    END AS state_group
FROM users
WHERE country="US" AND state IS NOT NULL
GROUP BY state_group;

```

**Question 12:**

```

%%sql
SELECT COUNT(DISTINCT dog_guid)
FROM dogs
WHERE dna_tested=1 AND (dimension='stargazer' OR dimension='socialite');

```