

MySQL Exercise 10: Answer Key

Question 1:

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

Question 2:

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

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<=10 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
LIMIT 50;
```

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');
```

