

### **MySQL Exercise 9: Answer Key**

Question 1:

```
%%sql
SELECT AVG(TIMESTAMPDIFF(minute,start_time,end_time)) AS AvgDuration
FROM exam_answers
WHERE TIMESTAMPDIFF(minute,start_time,end_time)>0 AND test_name="Yawn
Warm-Up";
```

Question 2:

```
%%sql
SELECT *
FROM exam_answers
WHERE TIMESTAMPDIFF(minute,start_time,end_time) >
    (SELECT AVG(TIMESTAMPDIFF(minute,start_time,end_time)) AS AvgDuration
    FROM exam_answers
    WHERE TIMESTAMPDIFF(minute,start_time,end_time)>0 AND
    test_name="Yawn      Warm-Up");
```

Question 3:

```
%%sql
SELECT COUNT(*)
FROM exam_answers
WHERE subcategory_name IN ('Puzzles','Numerosity','Bark Game');
```

Question 4:

```
%%sql
SELECT COUNT(DISTINCT dog_guid)
FROM dogs
WHERE breed_group NOT IN ('Working','Sporting','Herding');
```

Question 5:

```
%%sql
SELECT DISTINCT u.user_guid AS uUserID
FROM users u
WHERE NOT EXISTS (SELECT d.user_guid
    FROM dogs d
    WHERE u.user_guid =d.user_guid);
```

Question 6:

```
%%sql
SELECT DISTINCT d.dog_guid, d.breed_group, u.state, u.zip
FROM dogs d, users u
WHERE breed_group IN ('Working','Sporting','Herding') AND d.user_guid=u.user_guid;
```

Question 7:

%%sql

```
SELECT DISTINCT d.dog_guid, d.breed_group, u.state, u.zip
FROM dogs d JOIN users u
  ON d.user_guid=u.user_guid
WHERE breed_group IN ('Working','Sporting','Herding');
```

Question 8:

%%sql

```
SELECT d.user_guid AS dUserID, d.dog_guid AS dDogID
FROM dogs d
WHERE NOT EXISTS (SELECT DISTINCT u.user_guid
  FROM users u
  WHERE d.user_guid =u.user_guid);
```

Question 9:

%%sql

```
SELECT DistinctUUsersID.user_guid AS uUserID, d.user_guid AS dUserID, count(*) AS
numrows
FROM (SELECT DISTINCT u.user_guid
  FROM users u
  WHERE u.user_guid='ce7b75bc-7144-11e5-ba71-058fbc01cf0b') AS
  DistinctUUsersID
LEFT JOIN dogs d
  ON DistinctUUsersID.user_guid=d.user_guid
GROUP BY DistinctUUsersID.user_guid
ORDER BY numrows DESC;
```

Question 10:

%%sql

```
SELECT DISTINCT d.user_guid
FROM dogs d
```

Question 11:

%%sql

```
SELECT DistinctUUsersID.user_guid AS uUserID, DistictDUsersID.user_guid AS
dUserID, count(*) AS numrows
FROM (SELECT DISTINCT u.user_guid
  FROM users u
  WHERE u.user_guid='ce7b75bc-7144-11e5-ba71-058fbc01cf0b') AS
  DistinctUUsersID
LEFT JOIN (SELECT DISTINCT d.user_guid
  FROM dogs d) AS DistictDUsersID
  ON DistinctUUsersID.user_guid=DistictDUsersID.user_guid
GROUP BY DistinctUUsersID.user_guid
ORDER BY numrows DESC;
```

Question 12:

```
%%sql
SELECT DistinctUUsersID.user_guid AS uUserID, DistictDUsersID.user_guid AS
dUserID,
DistictDUsersID.dog_guid AS DogID, DistictDUsersID.breed AS breed
FROM (SELECT DISTINCT u.user_guid
      FROM users u
      LIMIT 100) AS DistinctUUsersID
LEFT JOIN (SELECT DISTINCT d.user_guid, d.dog_guid, d.breed
          FROM dogs d) AS DistictDUsersID
  ON DistinctUUsersID.user_guid=DistictDUsersID.user_guid
ORDER BY DistinctUUsersID.user_guid;
```

Question 13:

```
%%sql
SELECT DistictUUsersID.user_guid AS userid, d.breed, d.weight, count(*) AS numrows
FROM (SELECT DISTINCT u.user_guid
      FROM users u) AS DistictUUsersID
LEFT JOIN dogs d
  ON DistictUUsersID.user_guid=d.user_guid
GROUP BY DistictUUsersID.user_guid
HAVING numrows>10
ORDER BY numrows DESC;
```