Lyft Trip Data SQL Code Output

Practice combining rows from different tables.

Suppose you are a Data Analyst at Lyft, a ride-sharing platform. For a project, you were given three tables:

- trips: trips information
- riders: user data
- cars: autonomous cars

1. **Examine the Three Tables**

test.sqlite

```
1  SELECT * FROM trips;
2  SELECT * FROM riders;
3  SELECT * FROM cars;
```

Save

Query Results

id	date	pickup	dropoff	rider_id	car_id	type	cost
1001	2017-12-05	06:45	07:10	102	1	X	28.66
1002	2017-12-05	08:00	08:15	101	3	POOL	9.11
1003	2017-12-05	09:30	09:50	104	4	X	24.98
1004	2017-12-05	13:40	14:05	105	1	X	31.27
1005	2017-12-05	15:15	16:00	103	2	POOL	18.95
1006	2017-12-05	18:20	18:55	101	3	XL	78.52
id	**first**	**last**	**username**	**rating**	**total_trips**	**referred**	
101	Sonny	Li	@sonnynomnom	4.66	352	Ø	
102	Laura	Breiman	@lauracle	4.99	687	101	
103	Kassa	Korley	@kassablanca	4.63	42	Ø	
104	Yakov	Kagan	@yakovkagan	4.52	1910	103	
id	**model**	**OS**	**status**	**trips_completed**			
1	Ada	Ryzac	active	82			
2	Ada	Ryzac	active	30			
3	Turing XL	Ryzac	active	164			
4	Akira	Finux	maintenance	22			

Database Schema

trips

name	type
id	INTEGER
date	TEXT
pickup	TEXT

2. **Cross join between riders and cars**

test.sqlite

```
SELECT riders.first,
riders.last,
cars.model
FROM riders, cars;
```

Save

Query Results

first	last	model
Sonny	Li	Ada
Sonny	Li	Ada
Sonny	Li	Turing XL
Sonny	Li	Akira
Laura	Breiman	Ada
Laura	Breiman	Ada
Laura	Breiman	Turing XL
Laura	Breiman	Akira
Kassa	Korley	Ada
Kassa	Korley	Ada
Kassa	Korley	Turing XL
Kassa	Korley	Akira
Yakov	Kagan	Ada
Yakov	Kagan	Ada
Yakov	Kagan	Turing XL
Yakov	Kagan	Akira

Database Schema

trips

name	type
id	INTEGER
date	TEXT
pickup	TEXT

3. **Suppose we want to create a Trip Log with the trips and its users. Find the columns to join between trips and riders and combine the two tables using a LEFT JOIN. Let trips be the left table.**

test.sqlite

```
SELECT trips.date,
trips.pickup,
trips.dropoff,
trips.type,
trips.cost,
riders.first,
riders.last,
riders.username
FROM trips
LEFT JOIN riders
ON trips.rider_id =
riders.id;
```

Save

Query Results

first	last	model
Sonny	Li	Ada
Sonny	Li	Ada
Sonny	Li	Turing XL
Sonny	Li	Akira
Laura	Breiman	Ada
Laura	Breiman	Ada
Laura	Breiman	Turing XL
Laura	Breiman	Akira
Kassa	Korley	Ada
Kassa	Korley	Ada
Kassa	Korley	Turing XL
Kassa	Korley	Akira
Yakov	Kagan	Ada
Yakov	Kagan	Ada
Yakov	Kagan	Turing XL
Yakov	Kagan	Akira

Database Schema

trips

name	type
id	INTEGER
date	TEXT
pickup	TEXT

4. **Suppose we want to create a link between the trips and the cars used during those trips. Find the columns to join on and combine the trips and cars table using INNER JOIN.**

test.sqlite

```
1  SELECT *
2  FROM trips
3  JOIN cars
4  ON trips.car_id =
   cars.id;
```

Save

Query Results

first	last	model
Sonny	Li	Ada
Sonny	Li	Ada
Sonny	Li	Turing XL
Sonny	Li	Akira
Laura	Breiman	Ada
Laura	Breiman	Ada
Laura	Breiman	Turing XL
Laura	Breiman	Akira
Kassa	Korley	Ada
Kassa	Korley	Ada
Kassa	Korley	Turing XL
Kassa	Korley	Akira
Yakov	Kagan	Ada
Yakov	Kagan	Ada
Yakov	Kagan	Turing XL
Yakov	Kagan	Akira

Database Schema

trips

name	type
id	INTEGER
date	TEXT
pickup	TEXT

5. **The new riders data are in! There are three new users this month. Stack the riders table on top of the new table named riders2.**

test.sqlite

```
1  SELECT *
2  FROM riders
3  UNION
4  SELECT *
5  FROM riders2;
```

Save

Query Results

id	first	last	username	rating	total_trips	referred
101	Sonny	Li	@sonnynomnom	4.66	352	Ø
102	Laura	Breiman	@lauracle	4.99	687	101
103	Kassa	Korley	@kassablanca	4.63	42	Ø
104	Yakov	Kagan	@yakovkagan	4.52	1910	103
105	Zach	Sims	@zsims	4.85	787	Ø
106	Eric	Vaught	@posturelol	4.96	54	101
107	Jilly	Beans	@jillkuzmin	4.7	32	101

Database Schema

trips

name	type
id	INTEGER
date	TEXT
pickup	TEXT
dropoff	TEXT
rider_id	INTEGER
car_id	INTEGER
type	TEXT
cost	INTEGER

Rows: 6

riders

name	type
id	INTEGER

6. **What is the average cost for a trip? Round to 2 decimal places.**

test.sqlite

```
1  SELECT ROUND(AVG(cost)
   , 2)
2  FROM trips;
```

Save

Query Results

ROUND(AVG(cost), 2)
31.92

Database Schema

trips

name	type
id	INTEGER
date	TEXT
pickup	TEXT
dropoff	TEXT
rider_id	INTEGER
car_id	INTEGER
type	TEXT
cost	INTEGER

Rows: 6

riders

name	type
id	INTEGER
first	TEXT
last	TEXT
username	TEXT
rating	INTEGER
total_trips	INTEGER
referred	INTEGER

7. **Lyft is looking to do an email campaign for all the irregular users. Find all the riders who have used Lyft less than 500 times.**

test.sqlite

```
1  SELECT *
2  FROM riders
3  WHERE total_trips <
   500
4  UNION
5  SELECT *
6  FROM riders2
7  WHERE total_trips <
   500;
```

Save

Query Results

id	first	last	username	rating	total_trips	referred
101	Sonny	Li	@sonnynomnom	4.66	352	Ø
103	Kassa	Korley	@kassablanca	4.63	42	Ø
106	Eric	Vaught	@posturelol	4.96	54	101
107	Jilly	Beans	@jillkuzmin	4.7	32	101

Database Schema

trips

name	type
id	INTEGER
date	TEXT
pickup	TEXT
dropoff	TEXT
rider_id	INTEGER
car_id	INTEGER
type	TEXT
cost	INTEGER

Rows: 6

riders

name	type
id	INTEGER
first	TEXT
last	TEXT
username	TEXT

8. Calculate the number of cars that are active

test.sqlite

```
SELECT COUNT(*)
FROM cars
WHERE status =
'active';
```

Save

Query Results

COUNT(*)
3

Database Schema

trips

name	type
id	INTEGER
date	TEXT
pickup	TEXT
dropoff	TEXT
rider_id	INTEGER
car_id	INTEGER
type	TEXT
cost	INTEGER

Rows: 6

riders

name	type
id	INTEGER
first	TEXT
last	TEXT
username	TEXT
rating	INTEGER
total_trips	INTEGER
referred	INTEGER