

7. Develop one query that will help find how many customers do not have addresses.

A:

The screenshot shows a MySQL query editor window titled "Query 1". The query is as follows:

```
27 WHERE destination IS NOT NULL
28 ORDER BY destination Desc ;
29
30 • SELECT count(CustomerName)
31 FROM customers
32 WHERE Address IS NULL ;
33
34 • SELECT * FROM customers
```

The result grid shows the output of the query:

count(CustomerName)
6

8. Calculate the number of requests for each day of the week

A:

The screenshot shows a MySQL query editor window titled "Query 1". The query is as follows:

```
34 • SELECT DayOfWeek, count(RequestID)
35 FROM requests
36 GROUP BY DayOfWeek ;
37
38 • SELECT * FROM requests
```

The result grid shows the output of the query:

DayOfWeek	count(RequestID)
Monday	7
Tuesday	7
Wednesday	9
Thursday	6
Friday	12
Saturday	11
Sunday	12

9. Explain some of the previous results (in Question #8). Specifically, explain why there might be variation across days.

A:

As the data above illustrates, there are more requests on Friday, Saturday, and Sunday. Our inference is that after workdays, people finally have free time on Friday night and at the weekend. They might tend to go out and have some fun or travel to places that are further than places they are used to visiting, hence, the demand for Lyft would increase in those days.

10. For each age level of customers between 30 – 35, find the total number of past trips and minimum number of past trip for that age group. Also, include the number of customers in that age group. Sort the results by the age of customers. In other words, find the number of trips, etc, for 30-year-olds, 31-year-olds, ... 35-year-olds.

A:

```

38 •   SELECT Age, sum(PastTrips), min(PastTrips), count(CustomerName)
39   FROM customers
40   WHERE Age >= 30 AND Age <= 35
41   Group BY Age
42   Order BY Age;

```

	Age	sum(PastTrips)	min(PastTrips)	count(CustomerName)
▶	30	1	1	2
	31	1	1	1
	34	14	7	2
	35	12	1	4

11. For each driver of a white car, find all trips. Include the Destination and 2 other attributes in your results. Sort results in decreasing order of customer name

A:

```

44 •   SELECT CustomerName, Destination, Distance
45     FROM drivers INNER JOIN requests
46       ON drivers.DriverName = requests.DriverName
47     WHERE Color = 'White'
48     Order BY CustomerName DESC;

```

	CustomerName	Destination	Distance
▶	Todd Vaughn	NULL	NULL
	Todd Vaughn	NULL	NULL
	Saniyah Powell	Gardens	20
	Rylee King	Grants Farm	20
	Miranda Jennings	NULL	NULL
	Miranda Jennings	Arch	21
	Mariela Meyer	Stadium	4
	Mariana Schwartz	Stadium	17
	Lennon Hunt	WashU	23
	Gemma Chavez	Grants Farm	9
	Emerson Gilbert	NULL	NULL
	Barrett Calderon	WashU	5
	Athena Dennis	NULL	NULL

12. Find the name, gender, and address of customers that drove to the Stadium this past week.

A:

```

50 •   SELECT customers.CustomerName, Gender, Address
51     FROM customers INNER JOIN requests
52       ON customers.CustomerName = requests.CustomerName
53     WHERE Destination = 'Stadium'
54     GROUP BY customers.CustomerName;

```

	CustomerName	Gender	Address
▶	Lennon Hunt	M	St. Louis
	Saniyah Powell	M	NULL
	Mariana Schwartz	F	St. Louis
	Mariela Meyer	F	Clayton
	Rylee King	F	Chesterfield

13. List the number of requests for each customer. Sort the results in increasing order of number of requests. Note, include also customer address

A:

```

55 •   SELECT customers.CustomerName, count(RequestID) as request, address
56     FROM customers INNER JOIN requests
57       ON customers.CustomerName = requests.CustomerName
58     GROUP BY customers.CustomerName
59     Order BY count(RequestID);

```

	CustomerName	request	address
▶	Athena Dennis	1	St. Louis
	Dominic Bryan	1	Ballwin
	Mya Nash	1	NULL
	Emerson Gilbert	2	Florissant
	Jesse McKee	2	Florissant
	Milton Wu	2	St. Louis
	Gemma Chavez	3	St. Louis
	Miranda Jennings	3	NULL
	Tyrell Humphrey	3	Clayton
	Barrett Calderon	4	NULL
	Saniyah Powell	4	NULL
	Mariana Schwartz	5	St. Louis
	Rylee King	5	Chesterf...
	Lennon Hunt	6	St. Louis
	Mariela Meyer	6	Clayton
	Todd Vaughn	6	St. Louis
	Sidney Wheeler	10	Chesterf...

14. How much time did you spend on this assignment?

A:

About 1.5 hours