

Unacast work sample - Lars Folkestad

Question 1: What day of week has the most rides in 2014?

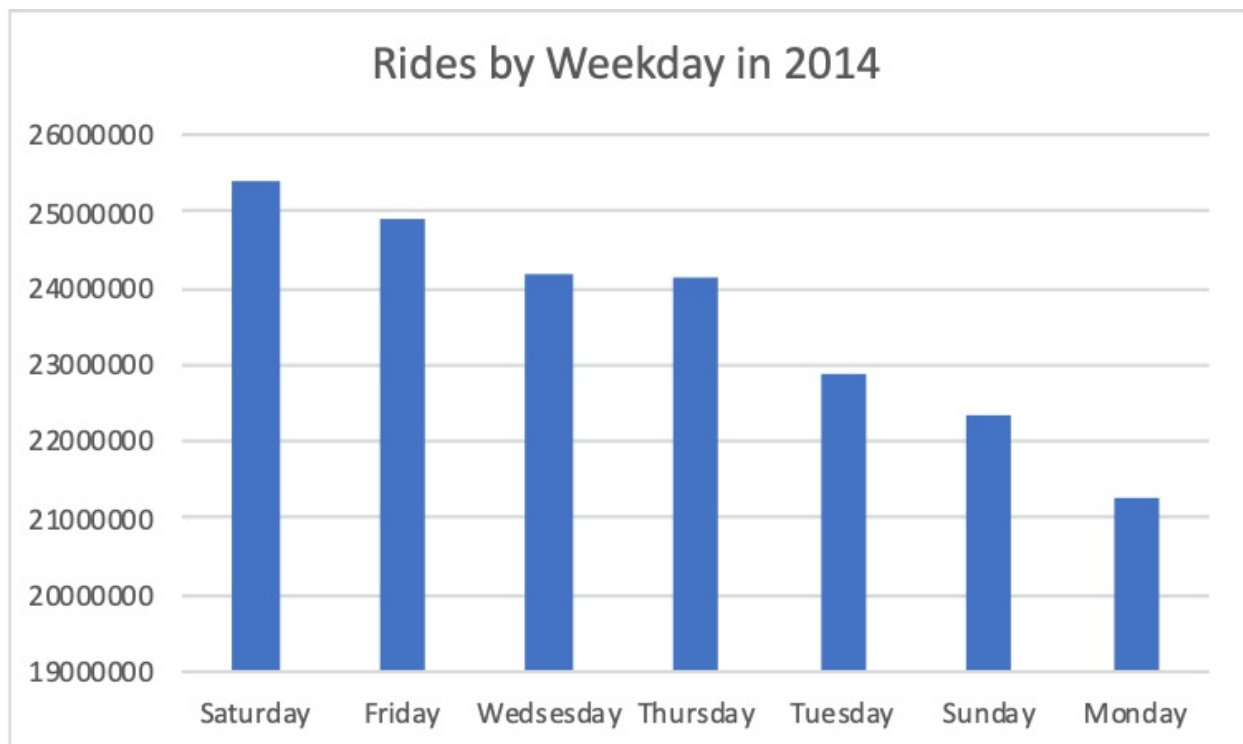
SQL query

[unacast_task1](#)

```
#What day of week has the most rides in 2014?
#Count trips started in 2014 as 2014 rides
SELECT
CASE EXTRACT(DAYOFWEEK FROM pickup_datetime)
  WHEN 1 THEN 'Sunday'
  WHEN 2 THEN 'Monday'
  WHEN 3 THEN 'Tuesday'
  WHEN 4 THEN 'Wednesday'
  WHEN 5 THEN 'Thursday'
  WHEN 6 THEN 'Friday'
  WHEN 7 THEN 'Saturday'
END
as Weekday
, COUNT(pickup_datetime) as RidesCount
FROM (
  SELECT pickup_datetime FROM `nyc-tlc.yellow.trips`
  WHERE EXTRACT(YEAR FROM pickup_datetime) = 2014
)
GROUP BY weekday
ORDER BY RidesCount DESC;
```

Output

From the chart we can see that Saturday is the day of the week with the most rides in 2014.



Question 2: How has the ratio of payments in cash and by credit card developed over time?

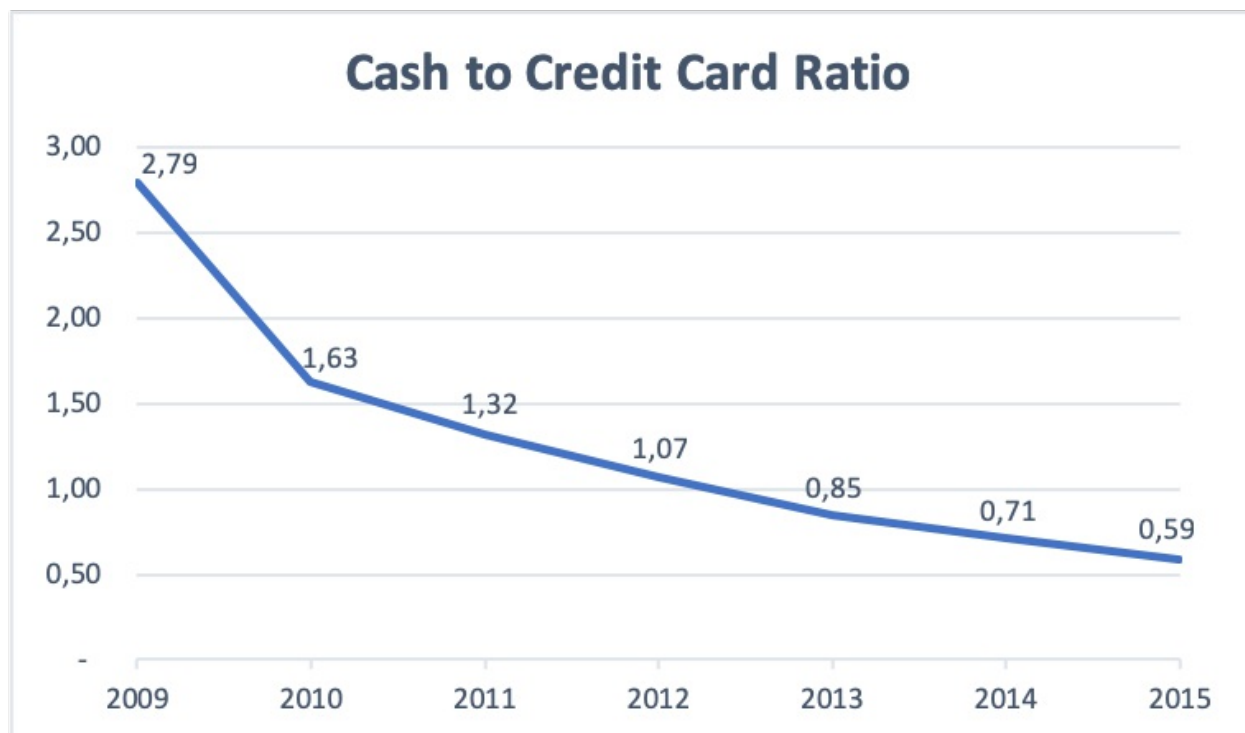
SQL query

[unacast_task2](#)

```
SELECT
#defined year of payment as year of dropoff, taking NYE into consideration
  EXTRACT(YEAR FROM dropoff_datetime) AS Year
, SUM(Case When payment_type = 'CSH' Then 1 Else 0 End )
/ SUM(Case When payment_type = 'CRD' Then 1 Else 0 End ) * 1.0 AS CashCreditRatio
FROM `nyc-tlc.yellow.trips`
#added because there was erroneous data points outside this range
#that caused zero division errors
WHERE EXTRACT(YEAR FROM dropoff_datetime) BETWEEN 2009 AND 2015
GROUP BY Year
ORDER BY Year ASC;
```

Output

The chart clearly shows a decreasing trend in the use of cash compared to the use of credit card from 2009 to 2015.



Question 3: What is the most popular area to be picked up in 2014, disregarding airports?