IS-603 Homework-3

Tableau

Visualizations

Instructions:

Please read the Instructions carefully.

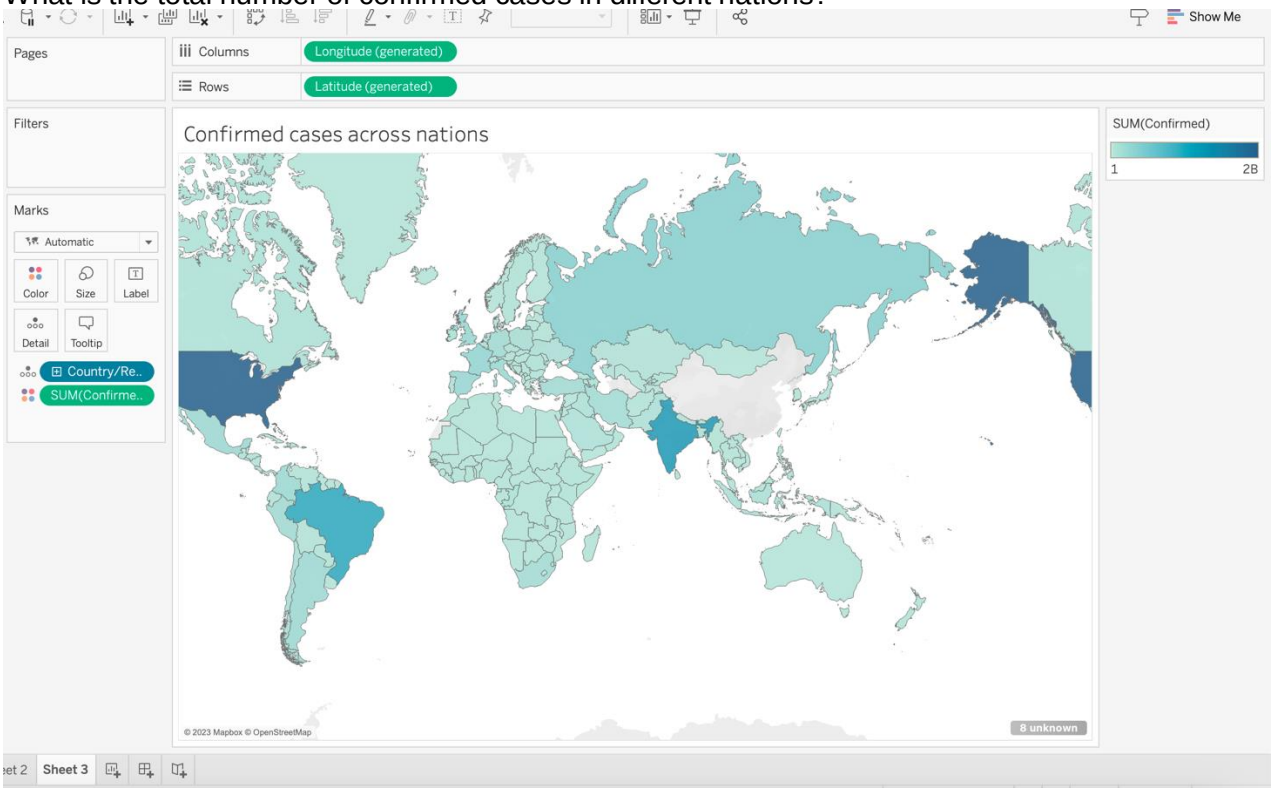
You are to make a number of small visualizations using Tableau See the Tableau documentation on how to use Tableau's main features. Also explore their website for instructional videos and demonstrations. We have attached visual-analysis-guidebook so that you can look at some of the good and bad practices for visualizations.

When you make your visualizations be sure to add the necessary elements to make them nicely finished presentations (i.e., include title, annotations, sorting, coloring/highlighting, etc. as you see fit to best communicate your message).

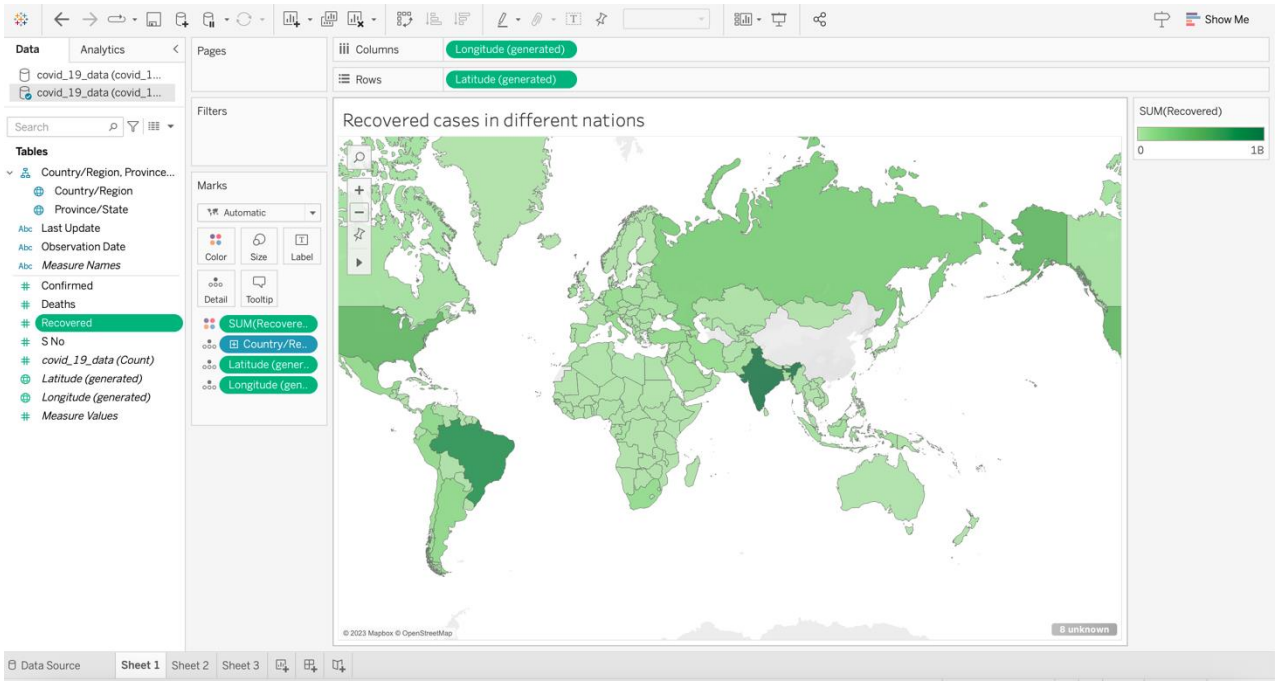
A couple hints before you begin:
HINT #1: The measure #calls equals volume of calls. Note the Tableau default is to sum measures.
HINT #2: In order to visualize data, you will need at least one measure (a dimension by itself will give you an empty table).
If you get stuck, consult Tableau's training resources
http://www.tableausoftware.com/learning/training

VISUALIZATION TASKS
1.Use covid-19 data for this question.

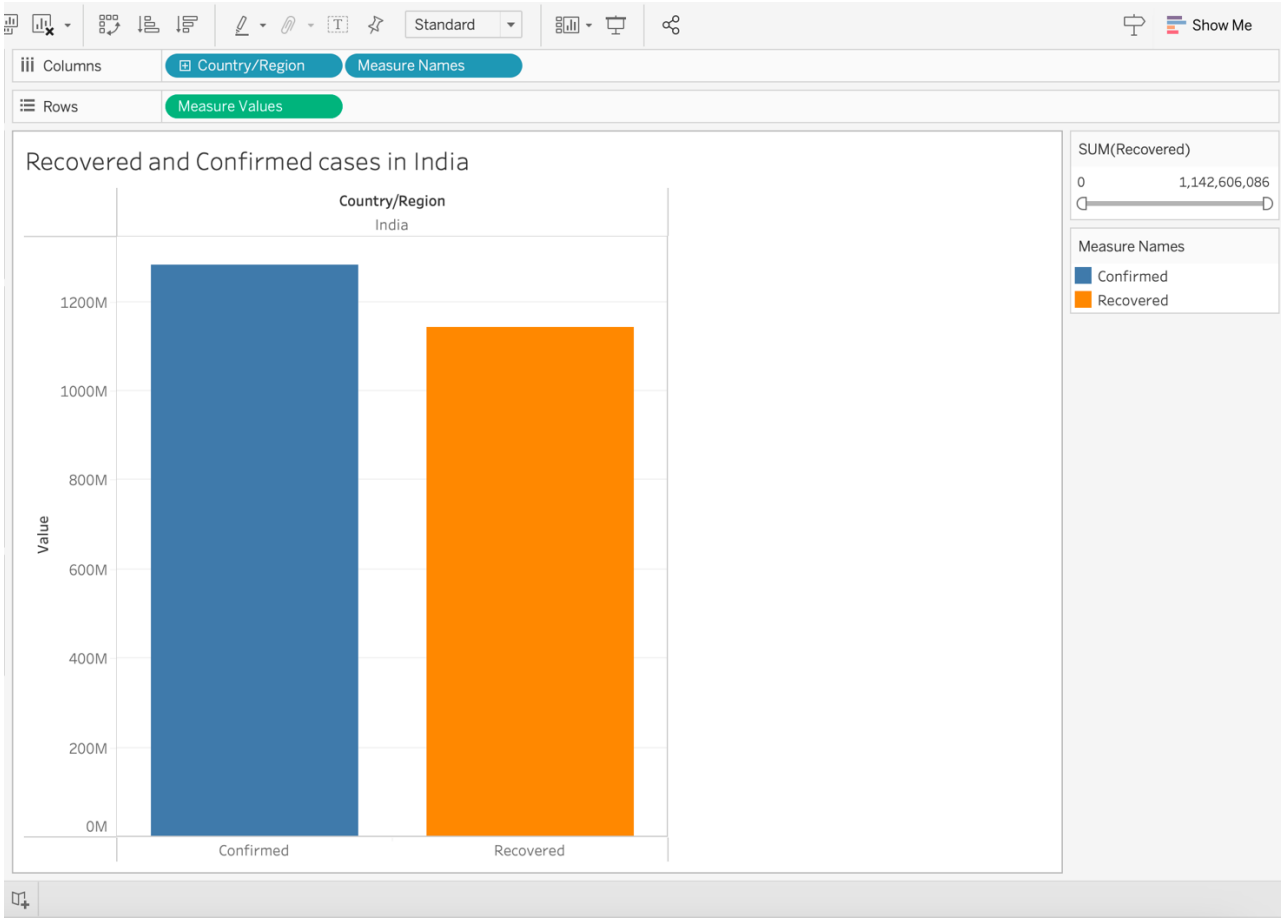
a) What is the total number of confirmed cases in different nations?



b) What is the total number of recovered cases in different nations?

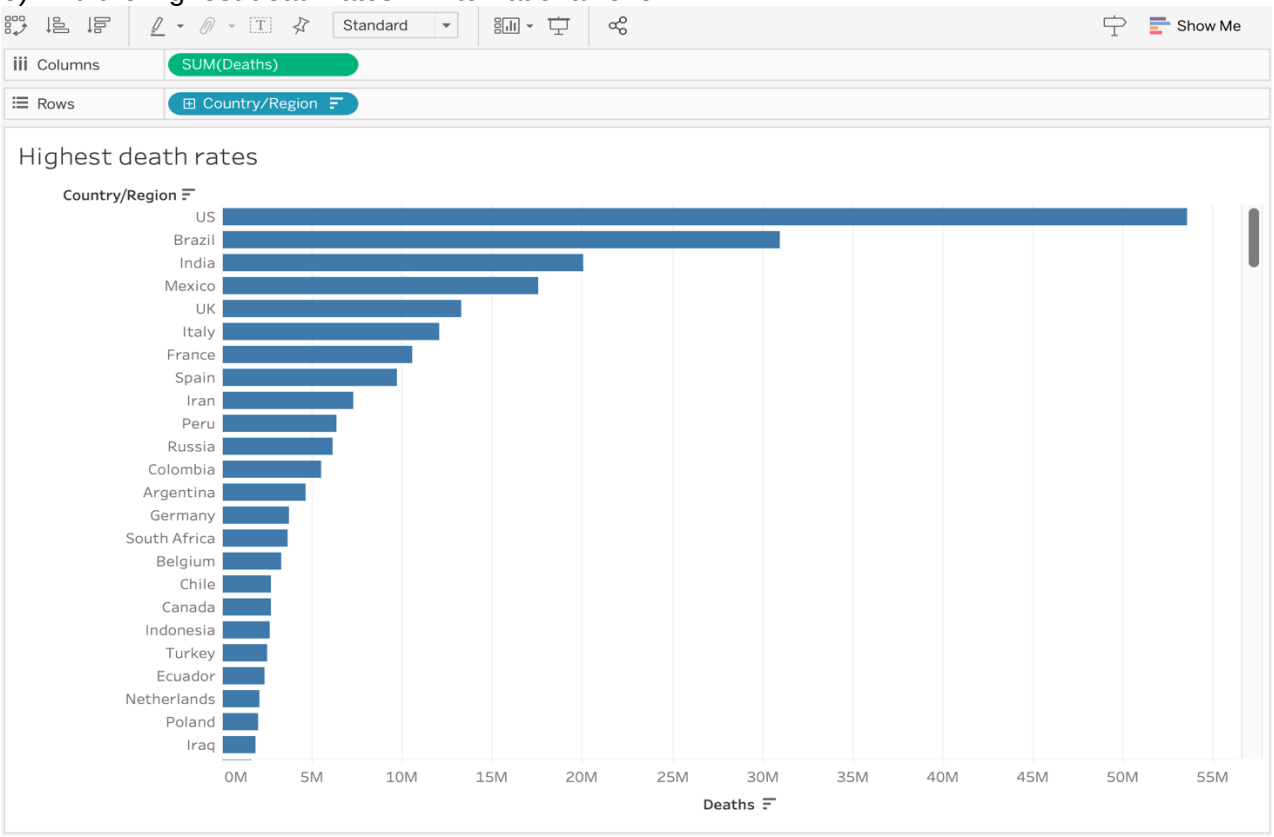


c) What is the total number of recovered and confirmed cases in india?

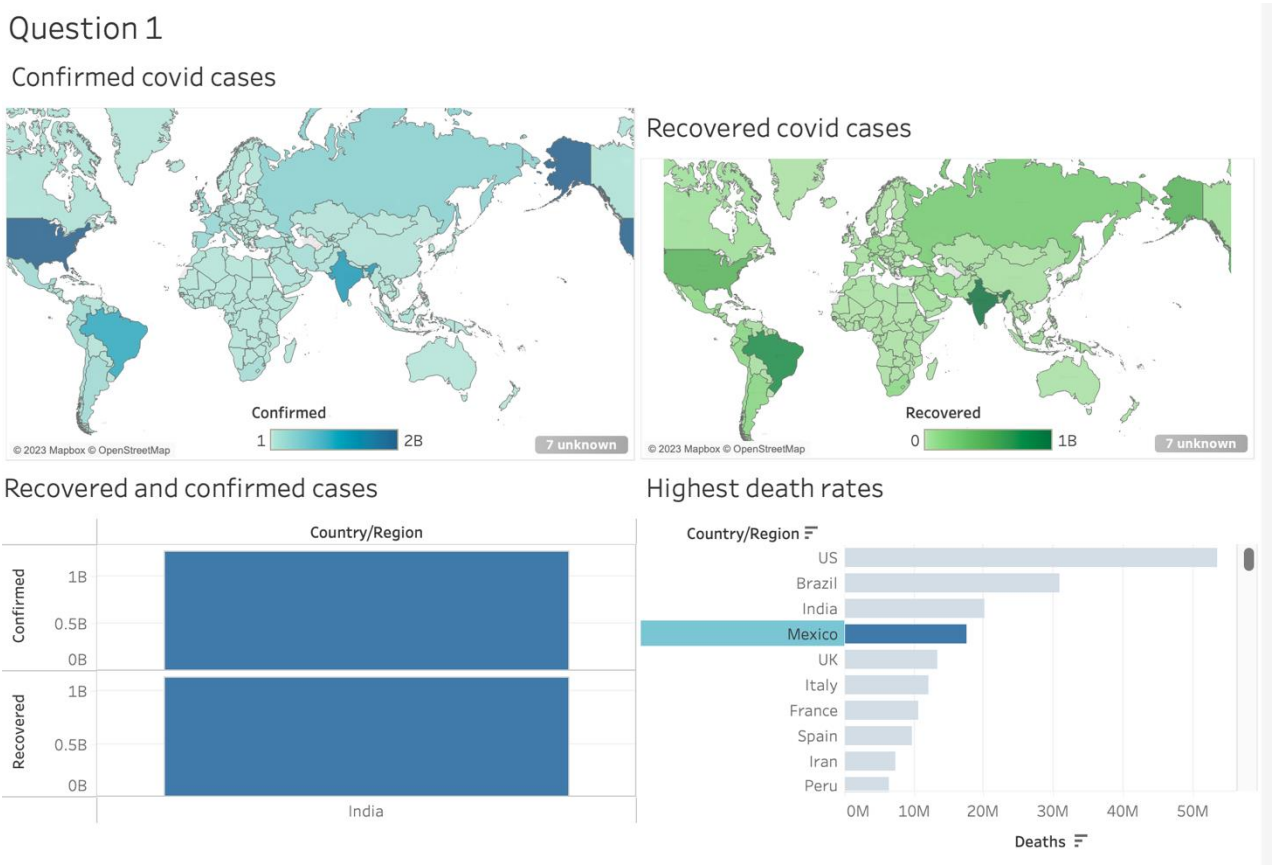


d) Can we forecast a trend line for Covid-19?
Trend line cannot be forecasted.

e) Find the highest death rates in international level.

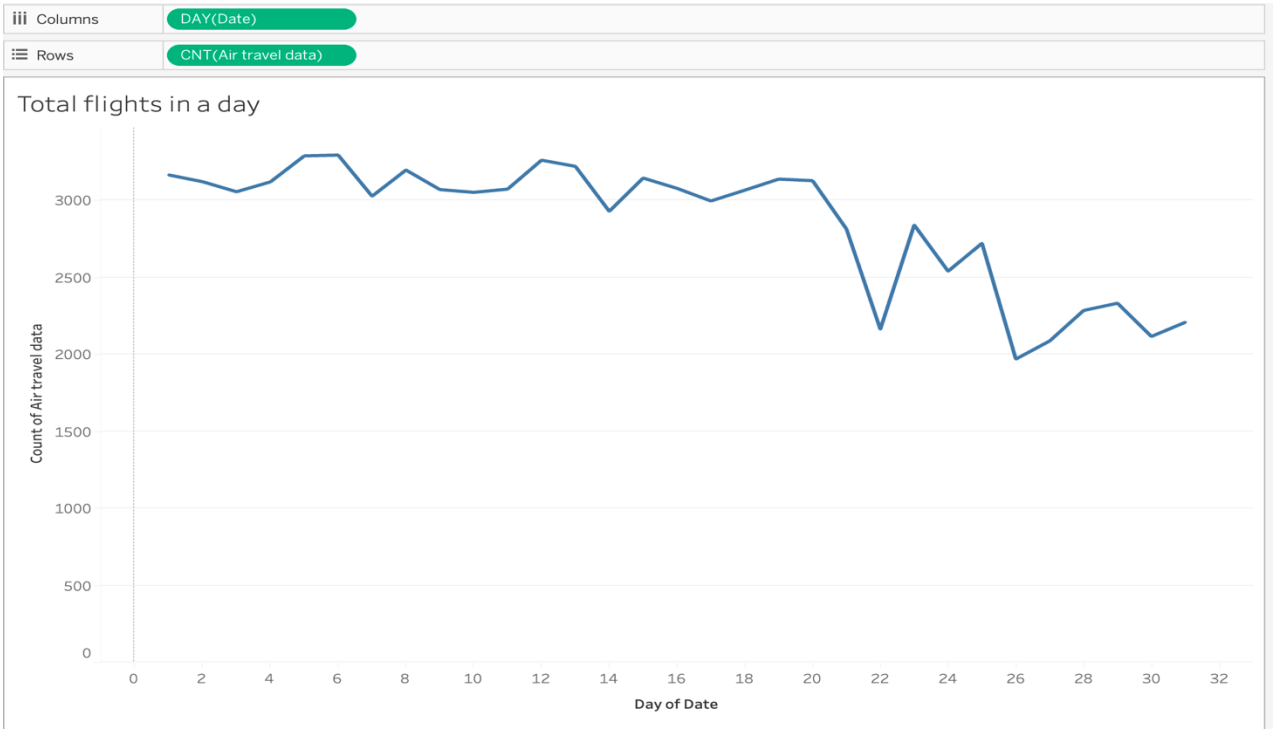


Make a dashboard (**DASHBOARD A**) containing all of these visualizations.

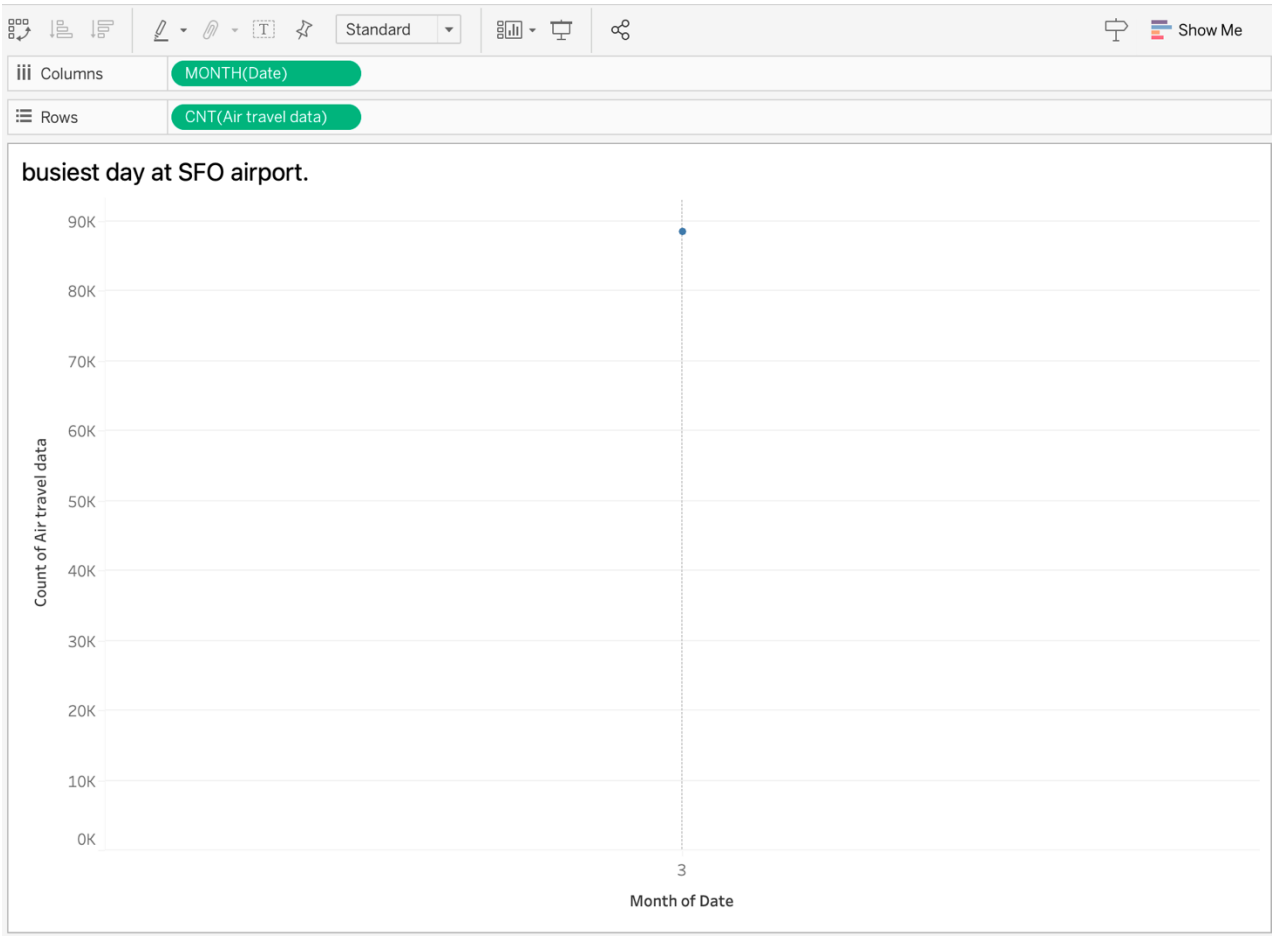


2.Use Airline data for this question.

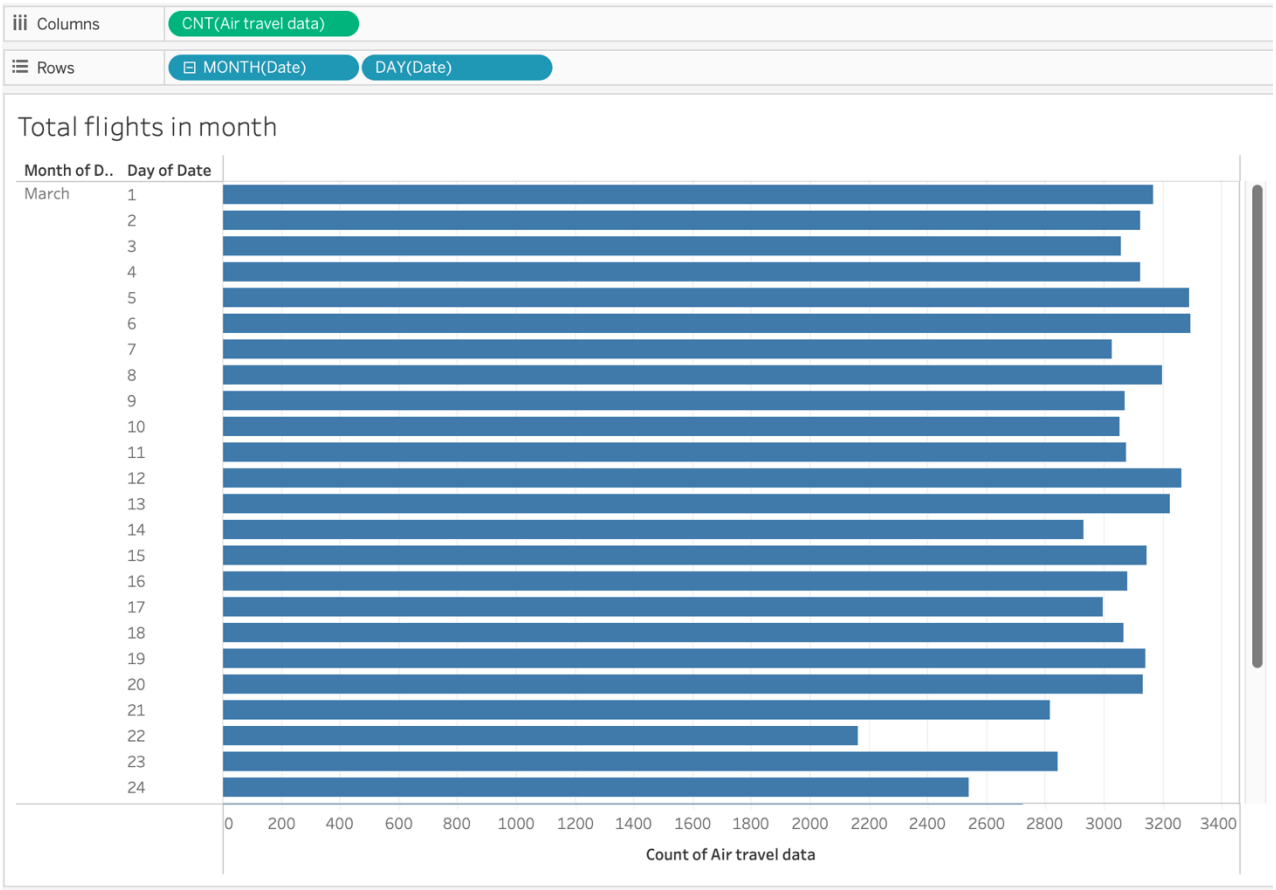
a) What is the total number of flights in a day?



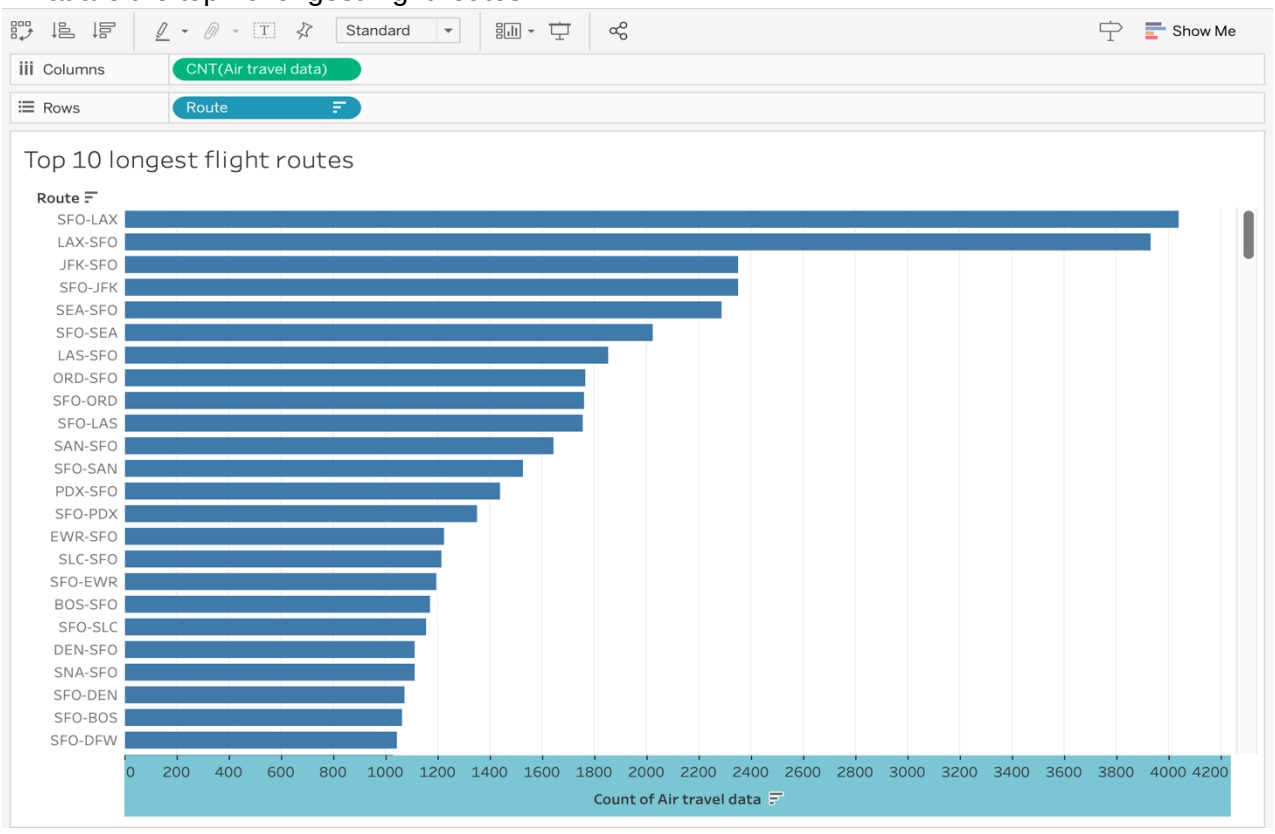
b) Find the busiest day at SFO airport.



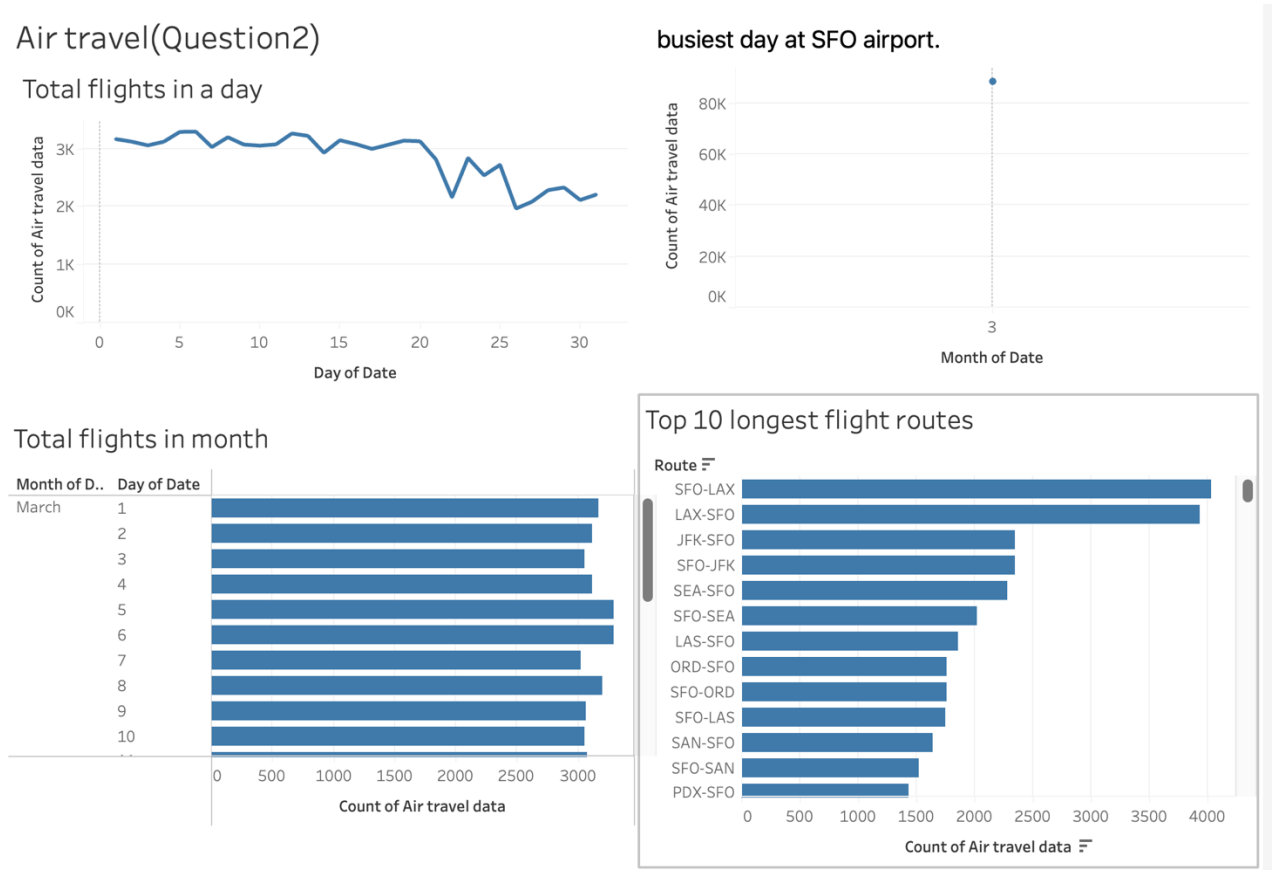
c) What is the total number of flights per day in a month?



d) What are the top 10 longest flight routes ?

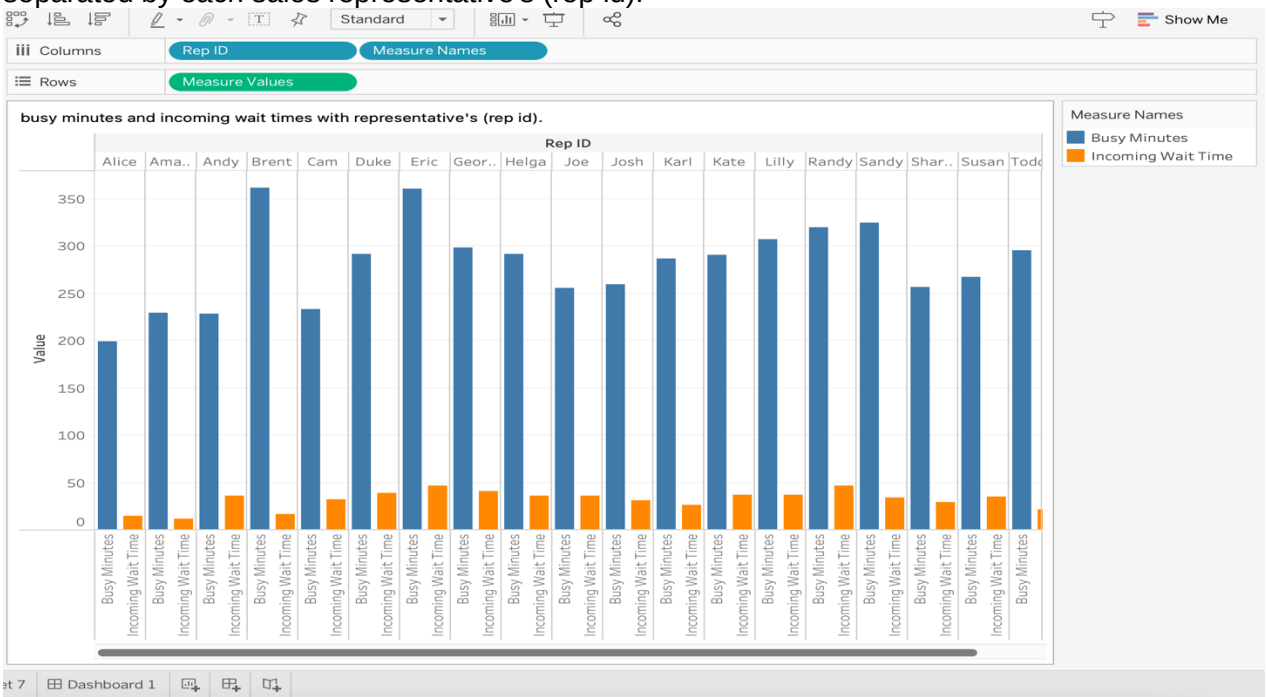


Make a dashboard (**DASHBOARD B**) containing all of these visualizations.

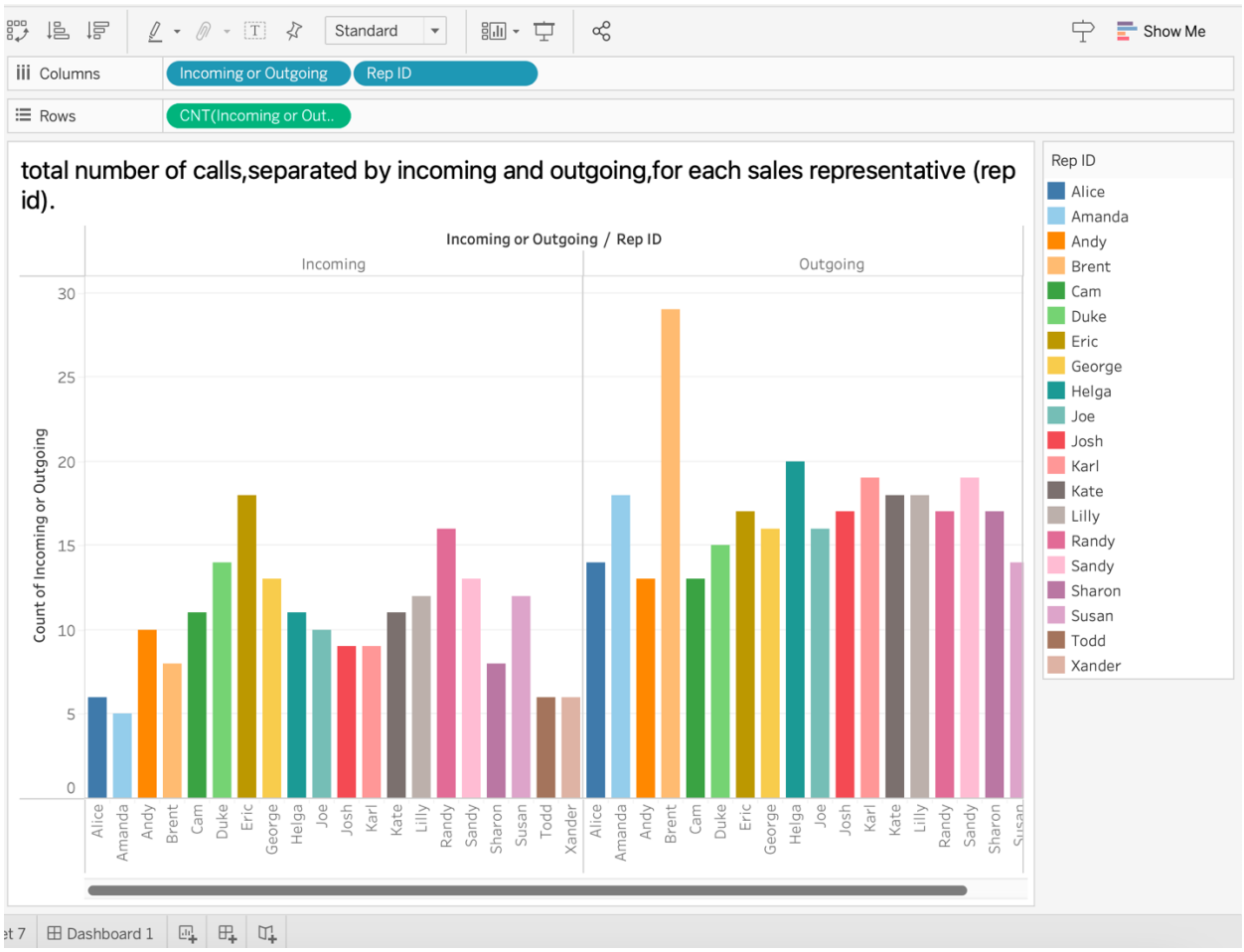


3. Sales Representative and Calls Performance - 20

a) Make a visualization showing the total number of busy minutes and incoming wait times separated by each sales representative's (rep id).

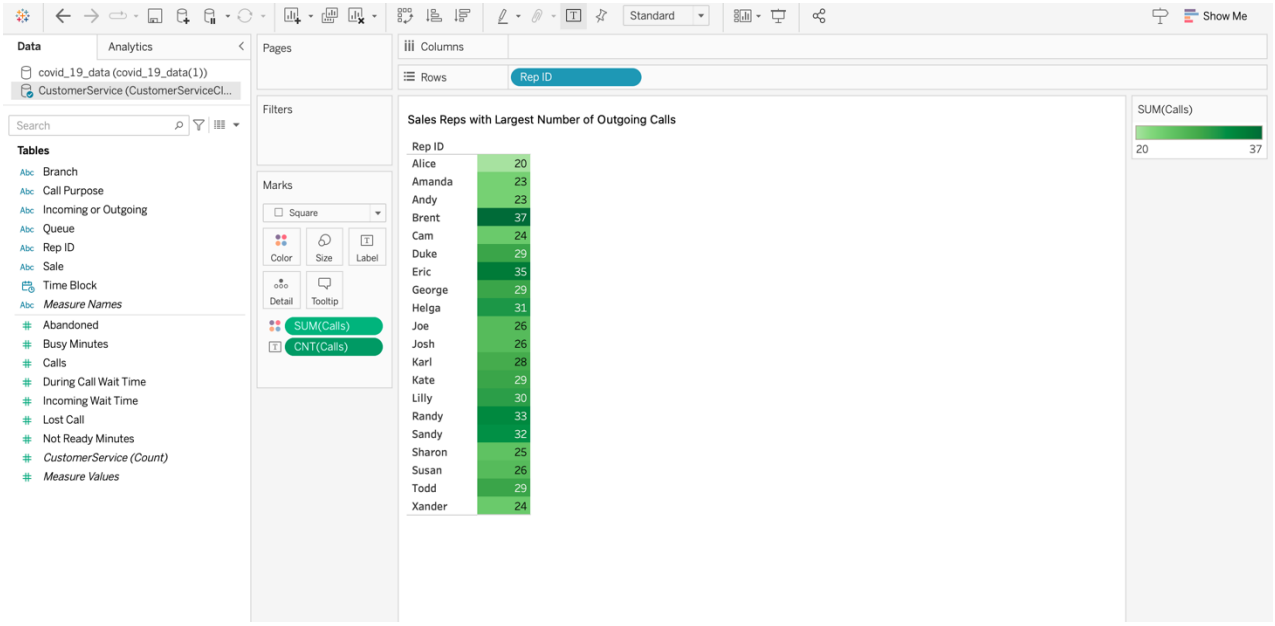


b) Make a visualization showing the total number of calls, separated by incoming and outgoing, for each sales representative (rep id).

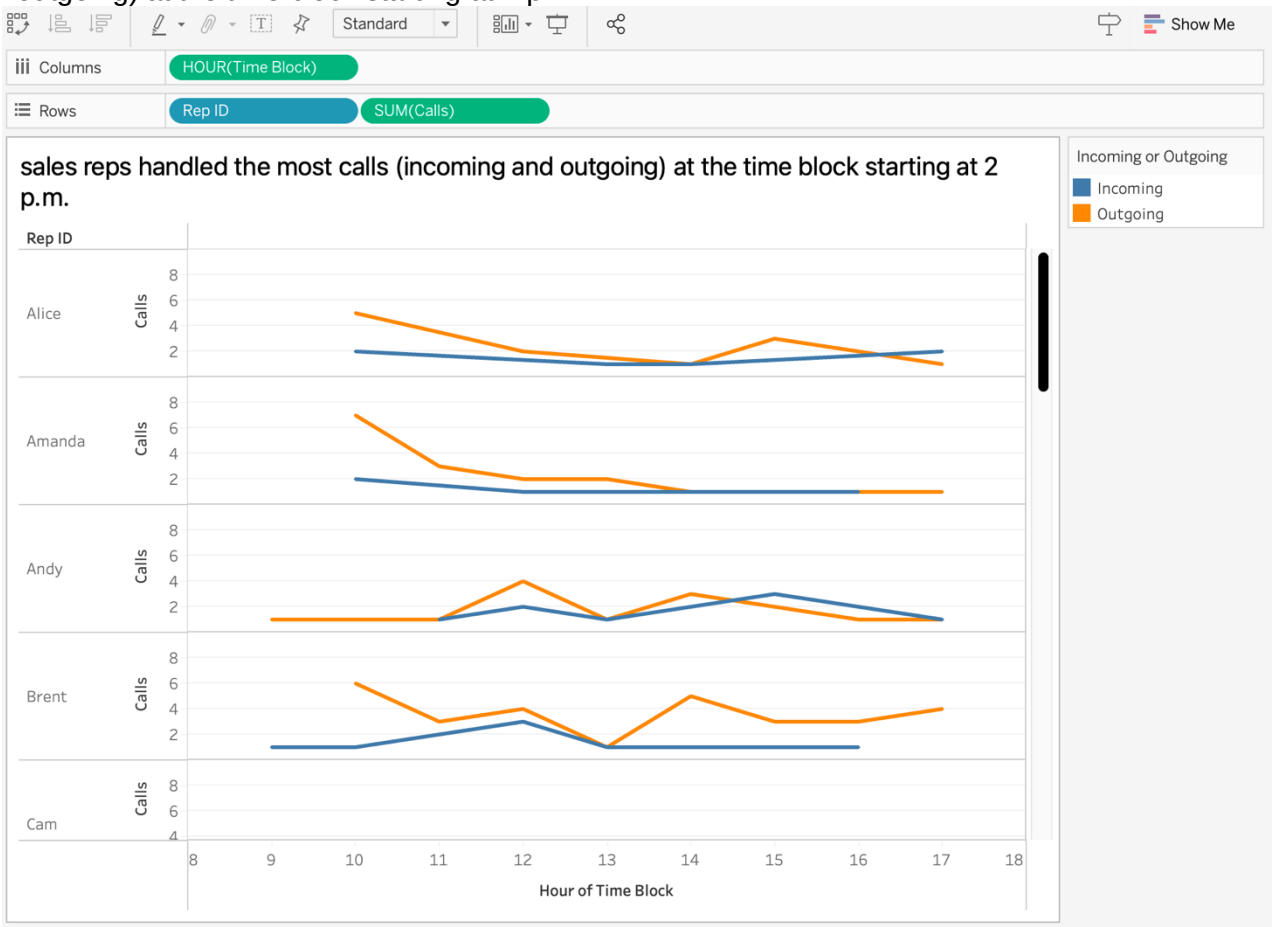

Standard
Show Me
Columns
Incoming or Outgoing
Rep ID
Rows
CNT(Incoming or Out..
total number of calls,separated by incoming and outgoing,for each sales representative (rep id).
Incoming or Outgoing / Rep ID
Incoming
Outgoing
Count of Incoming or Outgoing
0
5
10
15
20
25
30
Alice
Amanda
Andy
Brent
Cam
Duke
Eric
George
Helga
Joe
Josh
Karl
Kate
Lilly
Randy
Sandy
Sharon
Susan
Todd
Xander
Rep ID
Alice
Amanda
Andy
Brent
Cam
Duke
Eric
George
Helga
Joe
Josh
Karl
Kate
Lilly
Randy
Sandy
Sharon
Susan
Todd
Xander
Dashboard 1

c) Make a visualization showing which sales reps have the largest number of outgoing calls.

In the below chart the Brent with darker green has the largest number of outgoing calls

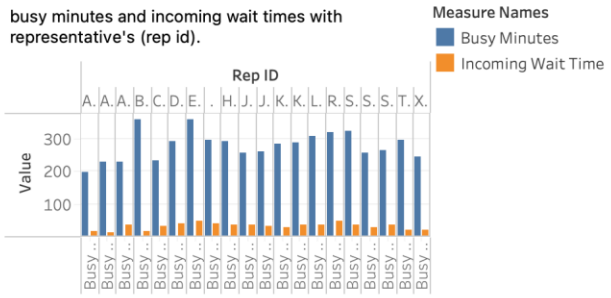


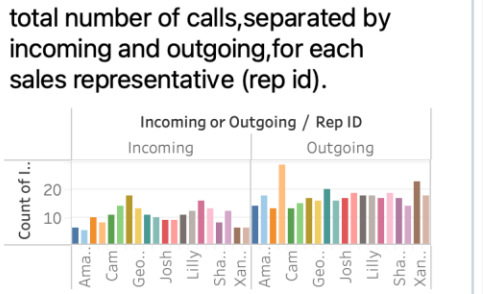
d) Make a visualization showing which sales reps handled the most calls (incoming and outgoing) at the time block starting at 2 p.m.

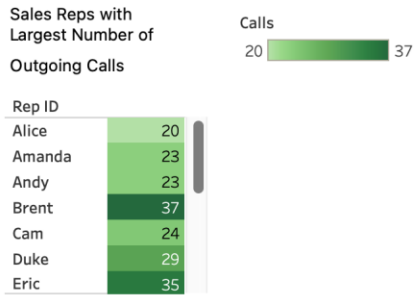


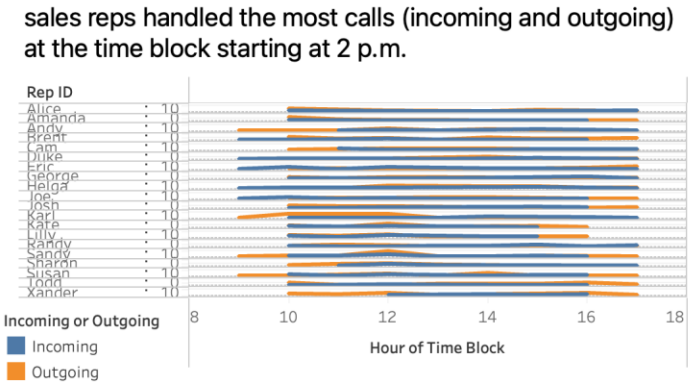
Make a dashboard (**DASHBOARD C**) containing all three (total calls, most calls, busy minutes) of these visualizations.

Question 3







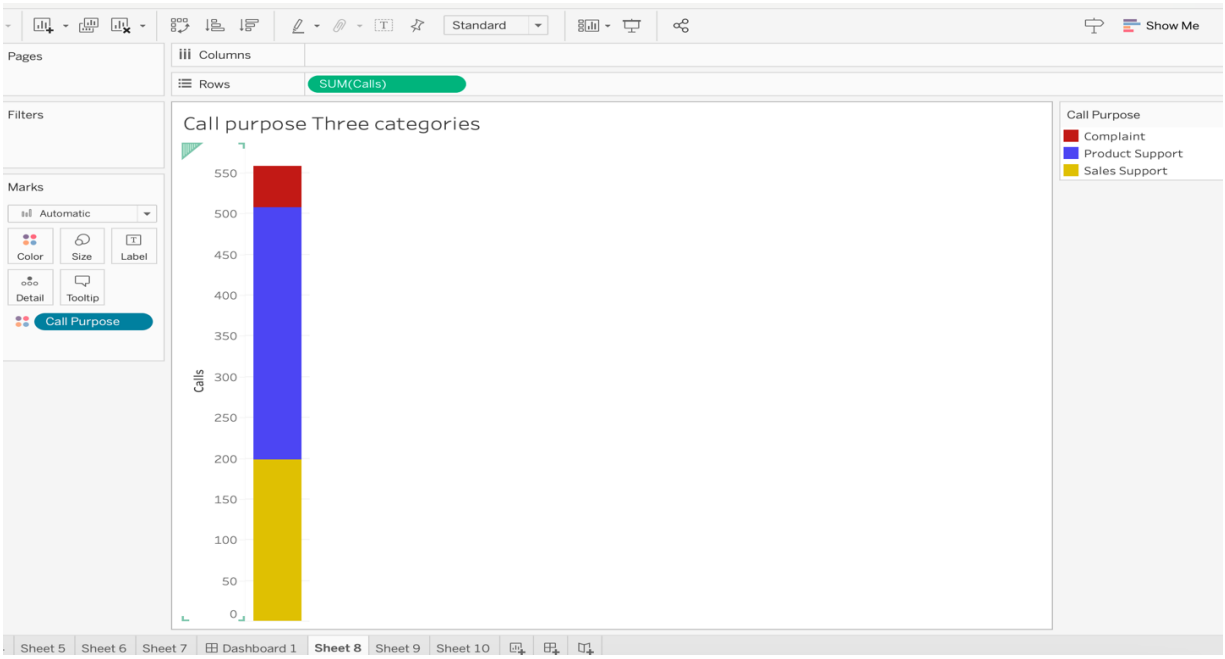


4. Company Sales Branches Comparison - 20

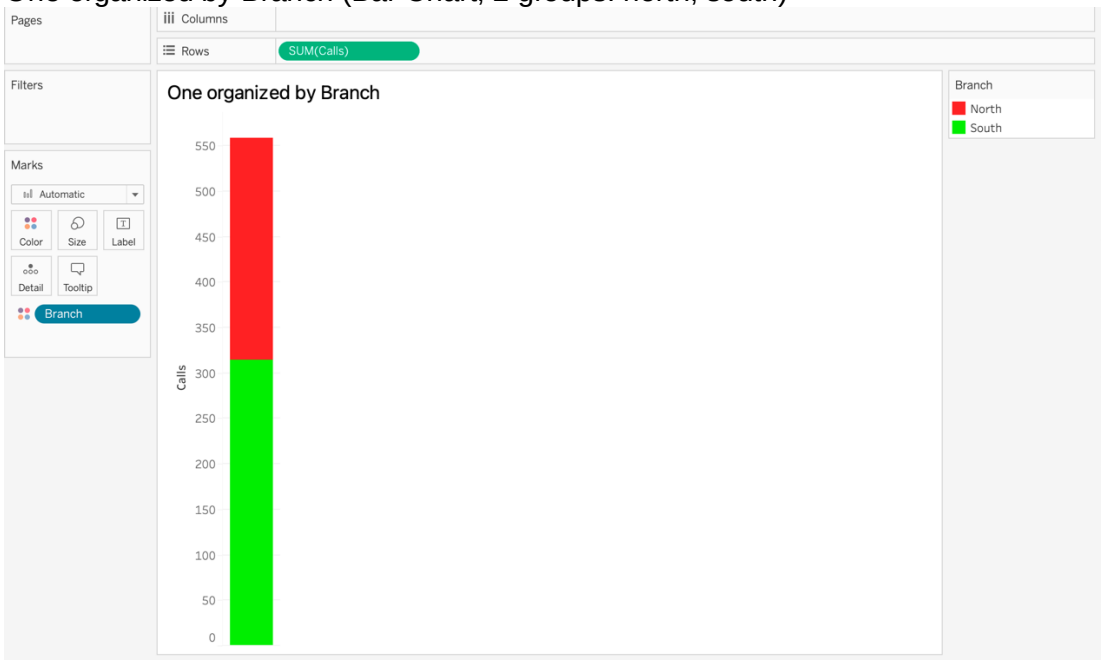
Your CEO wants to have one chart that allows her to easily comprehend how many calls each branch of the company has, broken out by the type of call (call purpose). You are to make four visualizations to put in a dashboard (**DASHBOARD B**) to show your manager (one of which you'll end up showing the CEO).

Describe which of the four you think is best and why and include it as an annotation on that visualization.

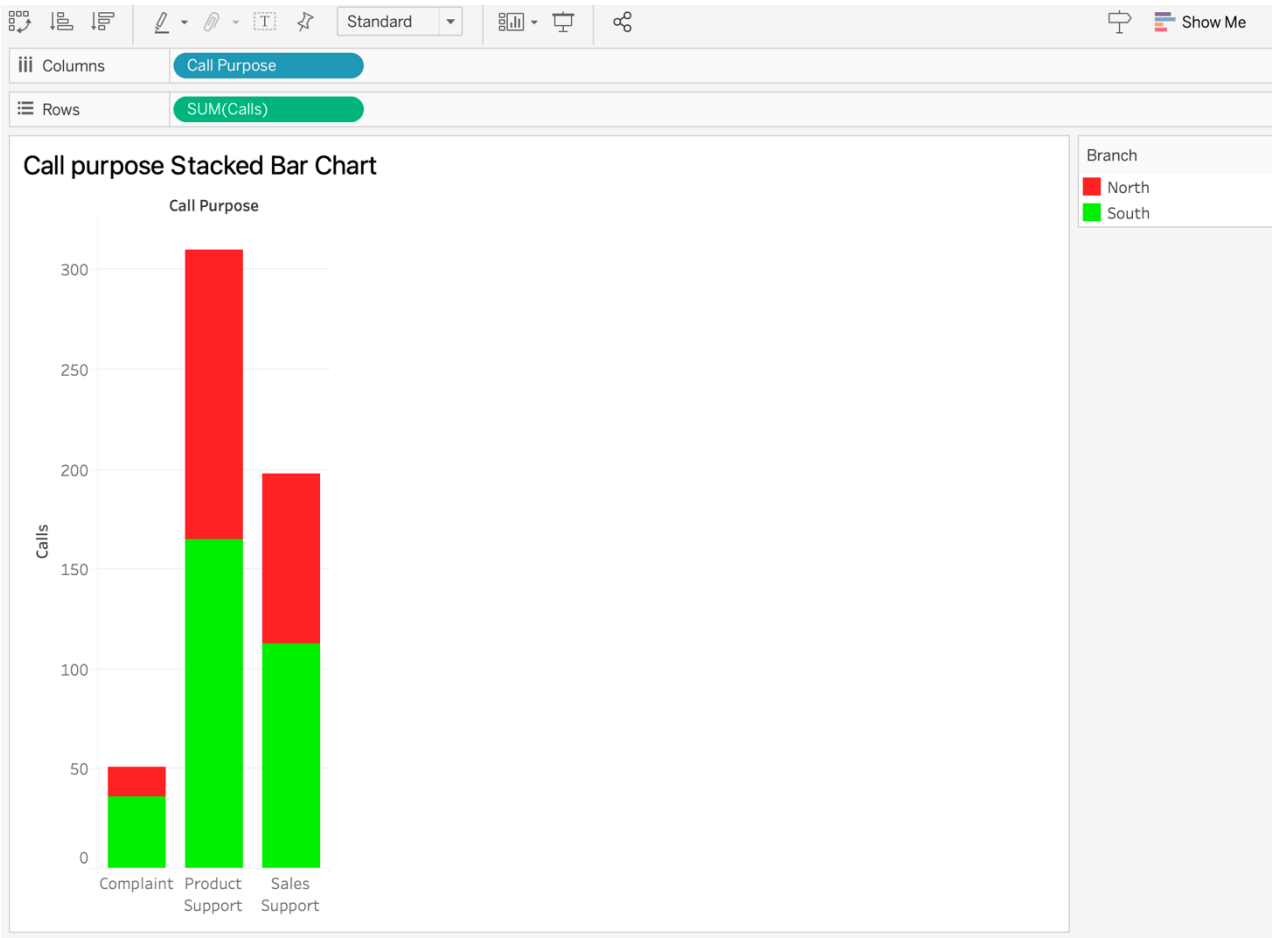
a) One focused on call purpose (Bar Chart, 3 groups: complaint, product support, sales support)



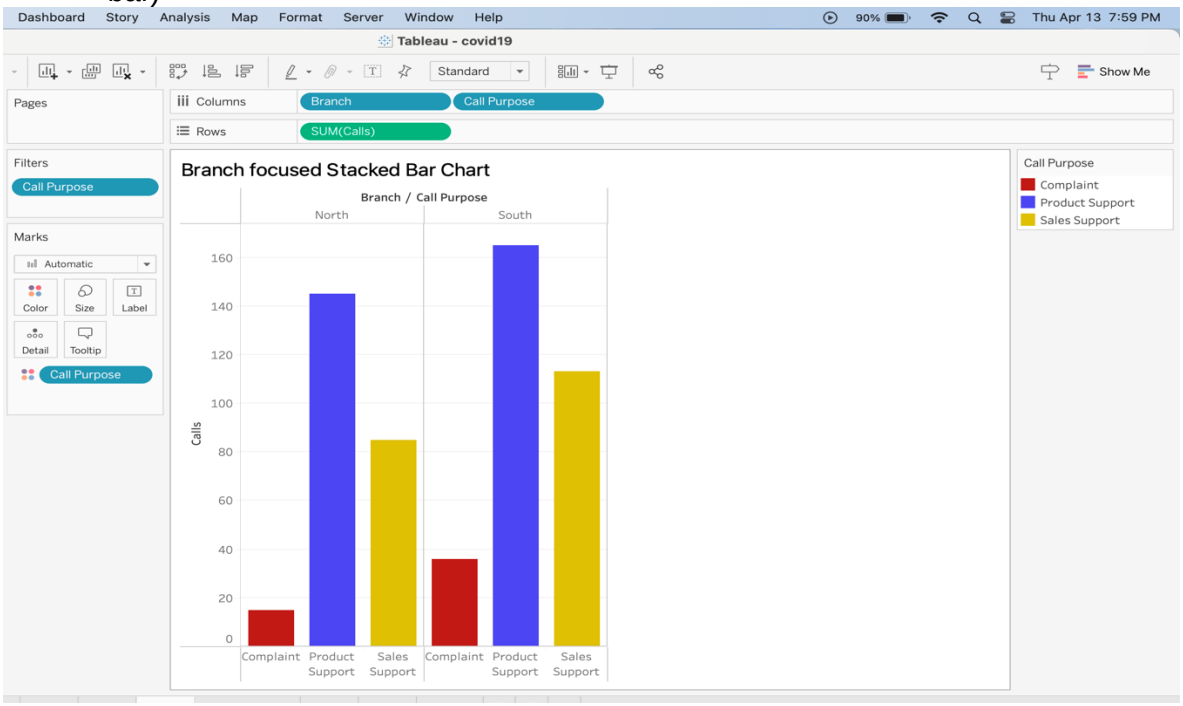
b) One organized by Branch (Bar Chart, 2 groups: north, south)



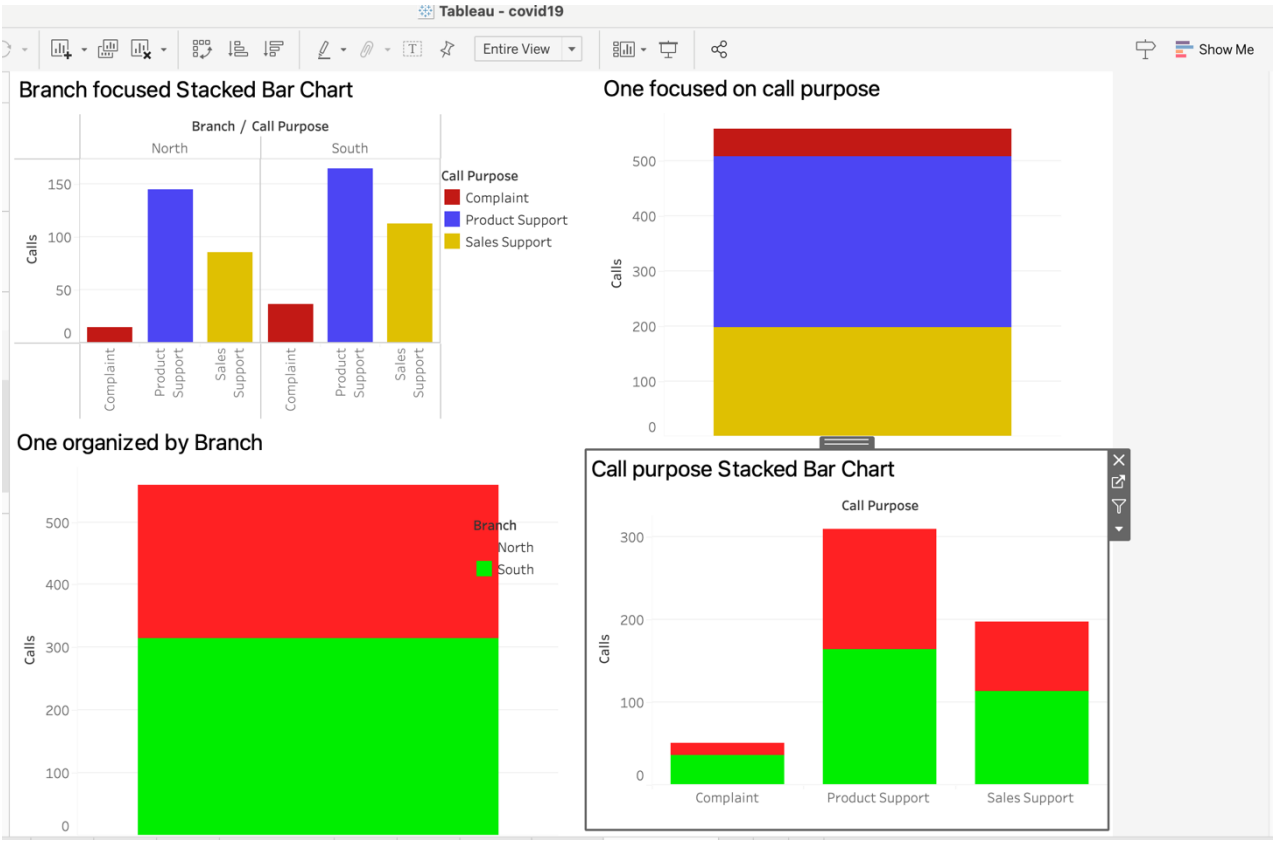
c) Call purpose Stacked Bar Chart (combining two branches into same stacked bar)



d) Branch focused Stacked Bar Chart (combining three call purposes into same stacked bar)

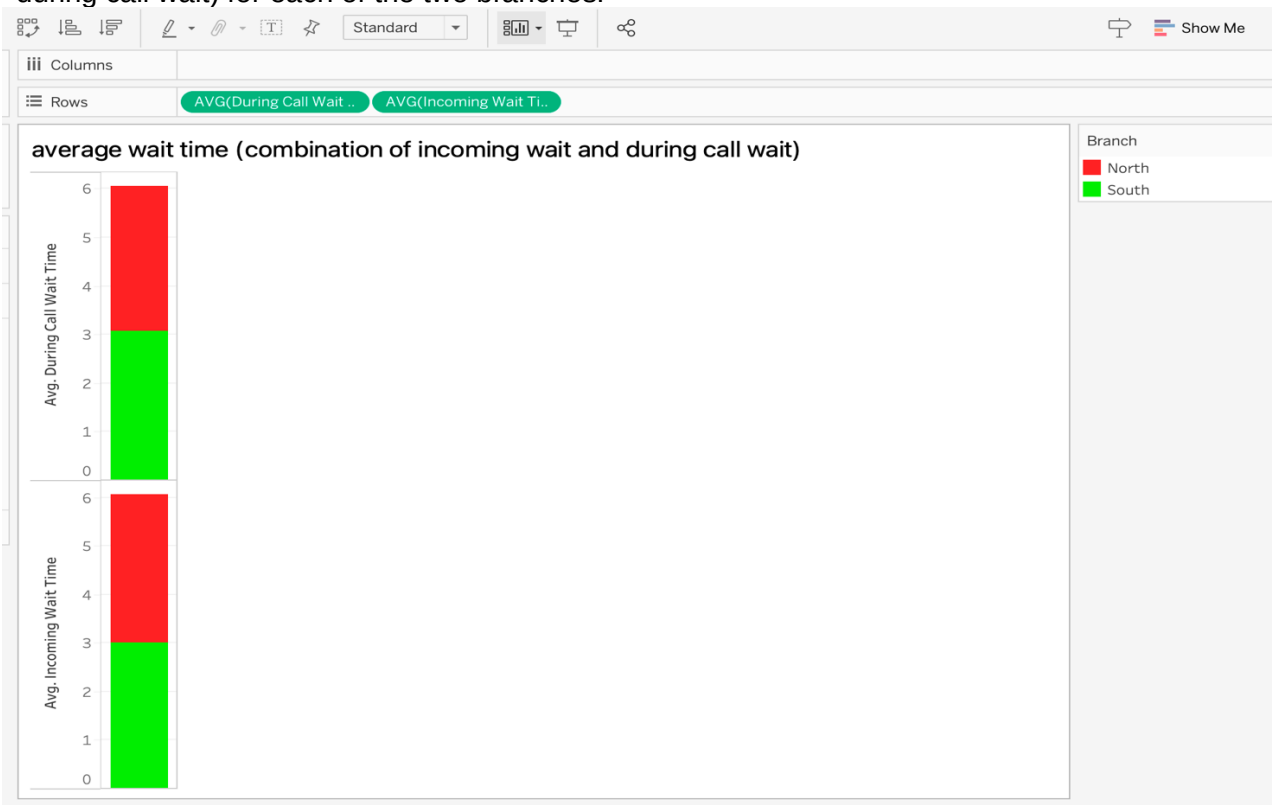


Dashboard for the above scenario

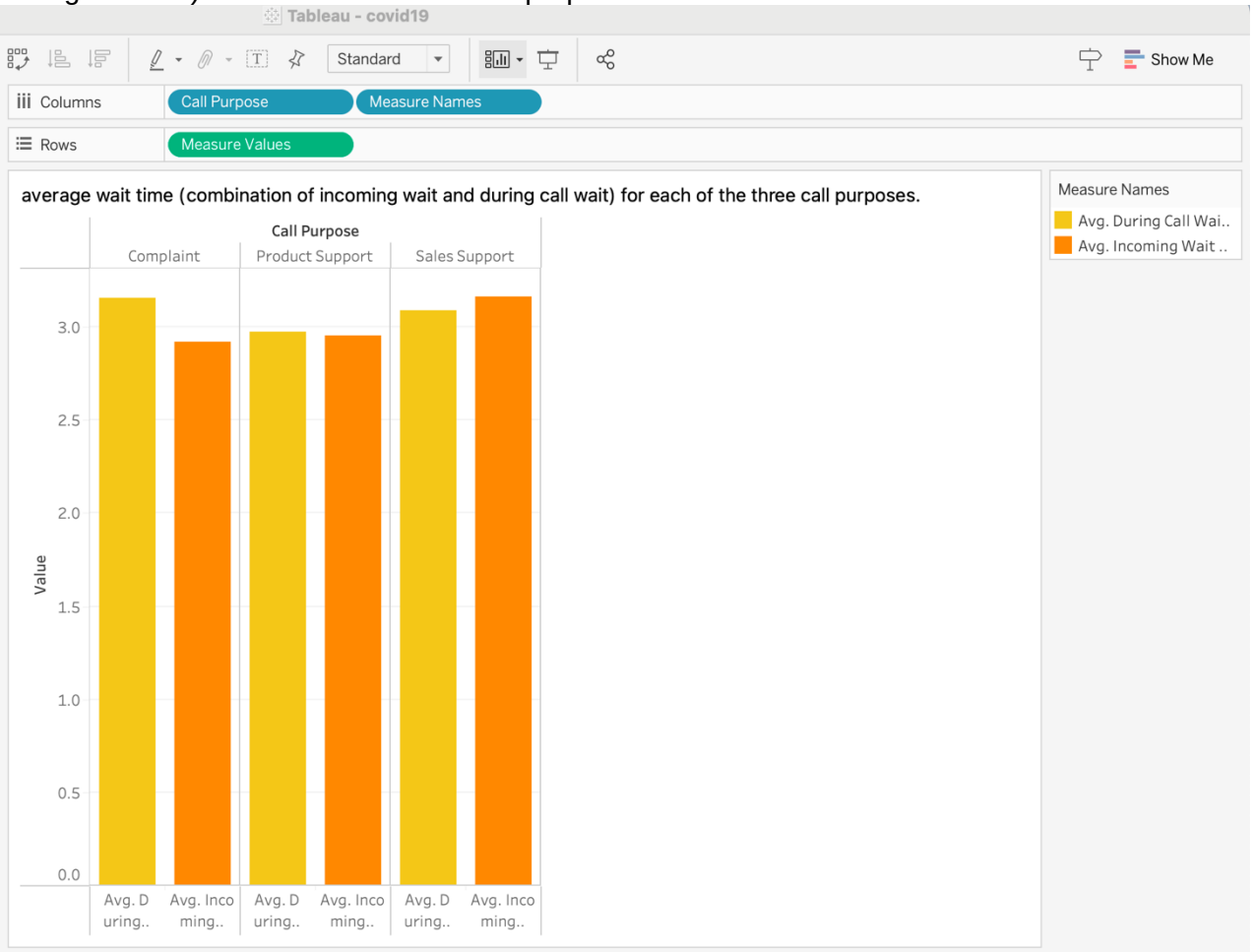


5. Call Time Analysis Make **DASHBOARD D** for the answers to (a)-(d). **– 20**

a) Make a visualization showing the average wait time (combination of incoming wait and during call wait) for each of the two branches.

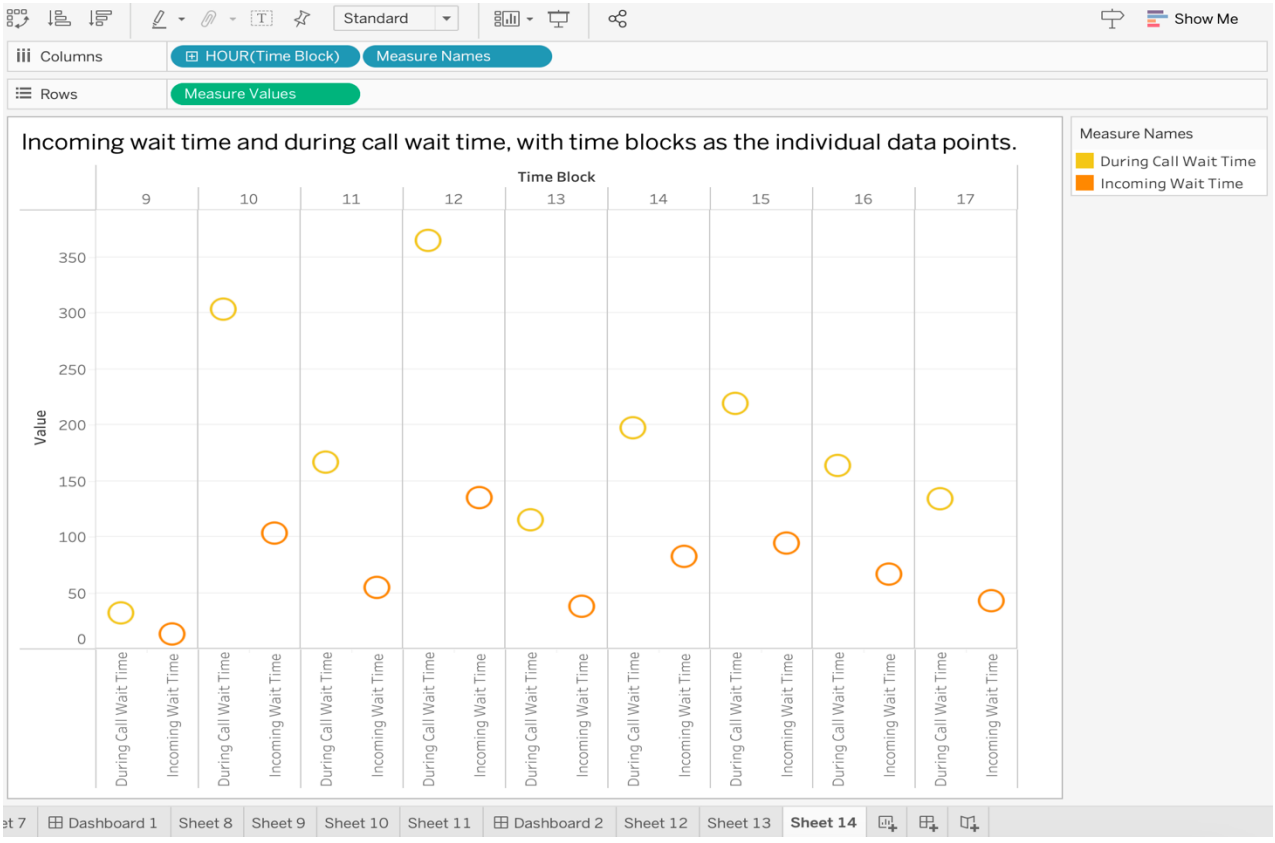


b) Make a visualization showing the average wait time (combination of incoming wait and during call wait) for each of the three call purposes.



c) Make a visualization (graph or chart) showing call volume over each of the time periods (hours) show volume over the time periods during the day. Break out by branch, and show two lines, one for each of north and south branches.

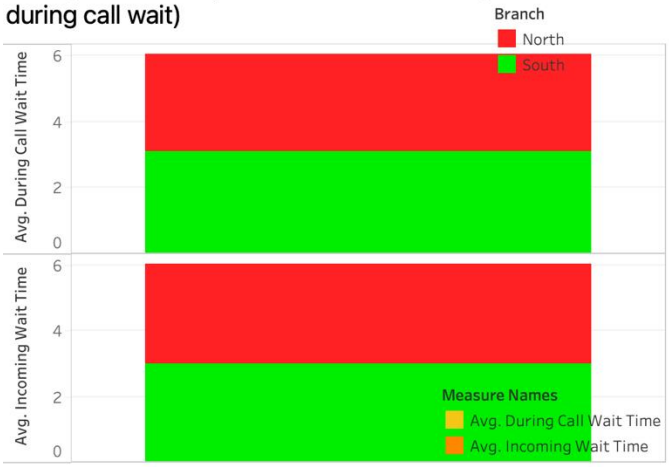
d) Using a scatter view, show the relationship between incoming wait time and during call wait time, with time blocks as the individual data points.



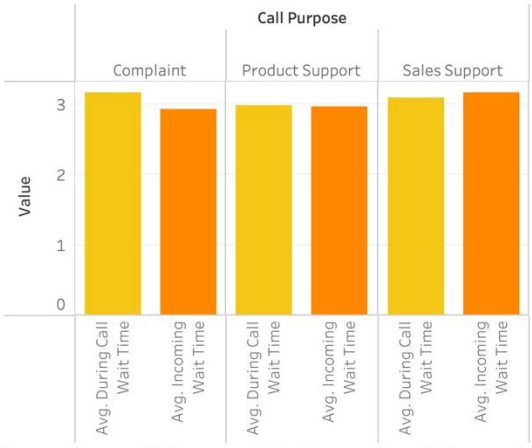
dashboard

Question5

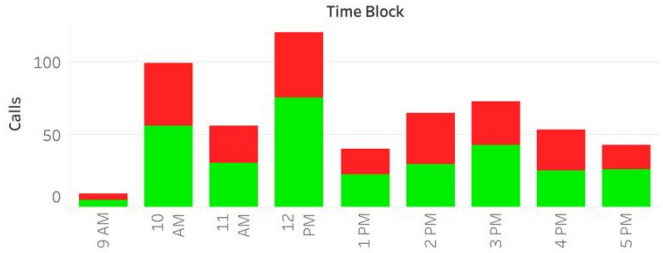
average wait time (combination of incoming wait and during call wait)



average wait time (combination of incoming wait and during call wait) for each of the three call purposes.



showing call volume over each of the time periods (hours)



Incoming wait time and during call wait time, with time blocks as the individual data points.