**Hands-on Practice Questions Tableau**

1. Use “Times ranking dataset” Create a bar chart that compares the Student Staff Ratio at different universities (University Name), and use filters to answer the following question: In 2016, what university in Canada with at least 27,000 students a year (Num Students) attending had the third-highest student to staff ratio?

2. Open “Global Superstore dataset” which has a filter showing the Top 10 Product Names by Sum of Sales. The Category filter is also shown. Use a context filter to show the top ten product names for each category. What was the third best selling product in the Office Supplies category?

3. Use European Airports2015.xlsx. Create a map using the IATA field name, and add Airport Name to Detail. Add sum of 2014 Passengers to Size on the Marks card. Filter the view to determine the five busiest airports in 2014. Which of the following are among the five busiest airport names?

4.Use European Airports 2015.xlsx. Create a view showing the number of passengers by Airport Name in 2014 and in 2015. Use a calculated field to show the difference in passengers from 2014 to 2015. Which airport showed the 5th-highest decline in passengers from 2014 to 2015?

5. Use CoffeeChain Query.xlsx. Create a chart comparing the sum of Profit by Product. Use sum of Budget Profit (the anticipated or projected profit) to create a dual-axis chart. Change Profit to Bar, and then synchronize the axes. How many products had profits that exceeded their budgeted profit?

6. Use CoffeeChain\_Query.xslx. Create a bar chart showing Profits over continuous months. Show the month-to-month percentage difference in profit. Add Product Type to rows. In 2012, which month saw a decrease in profit across all product types?

7. Use Test\_Results.xlxs. Create a bar chart to show the average score for each School (use Name) and Subject Area (use SubjectAreas Name). Filter the results to show only the state of Texas (TX). Then, create a calculated field that shows true if the average score is greater than or equal to 70 and false if less than 70. Using the calculated field, which of the following schools achieved an average score of greater than or equal to 70 in all 5 subject areas?

8. Use Global Superstore.xlsx. Join the Orders sheet with the Returns sheet using an inner join on the Order ID fields. Then use count of unique Order IDs to create a view that answers this question: For 2014, which Region had the third highest amount of orders returned?

9. Use Global Superstore.xlsx. Use the Orders table. Create a view that shows sum of Profit by Sub-Category. Create a calculated field that calculates the days between the Order Date and the Ship Date. Create another calculated field that shows true if the average amount of days between Order Date and Ship Date is less than 4 days and false if greater than or equal to 4. Using the calculated fields, of the Sub-Categories that had ship dates of less than 4 days, which one had the highest profit?

10. Use Global Superstore.xlsx. Use the Orders table. Create a view showing Profit for each Market in each Year. Then, add a reference line showing the average profit over the years for each market. What was the average profit for EMEA?

11. Use Yearly Sales.xlsx. Union the 2015, 2016, and 2017 sheets to show the quarterly sales value for each city for each year. Create a combined axis chart that shows the sum of sales for each quarter. Use the City and State field to slice each quarter. Then create a reference line for each quarter showing the average sales among the cities. Which quarter has the lowest average?

12. Use Global Superstore.xlsx Use the Sales by Market worksheet to filter the dashboard. Filter to just "USCA" market. What quantity was sold in the Technology Category in September 2013?

13. Using the Stocks 2010-2013 table, in the “tds\_sample\_data\_all “ dataset create a chart to see the monthly change in volumes of stocks, beginning of 2010 to the end of 2013. Which two consecutive months saw the least fluctuation in increase or decrease?

14. Using the Stocks 2010-2013 table, in the “tds\_sample\_data\_all “ dataset Create a crosstab showing the sum of Volume per Company per Year, then add grand totals to the view. What was the total volume for Apple in 2013 and the total volume for Apple for 2010 through 2013, respectively?

15. Using the Stocks 2010-2013 table, in the “tds\_sample\_data\_all “ dataset Create a chart that shows the percent difference in Volume for each company by year and quarter. How many quarters did Biogen Idec show a positive percent difference in volume?

16. Union the Stocks 2010-2013 and Stocks 2014 tables, and then create a chart showing the average Close price by year and quarter for each Company from 2010 to 2014. How many quarters was Amazon’s average closing price over $300?

17. Using the Flights table, create a bar chart showing the average of Minutes of Delay per Flight broken down by Carrier Name, and filtered by State to only show Minnesota (MN). What was the average minutes of delay per flight for United in Minnesota?