School of Computer Science and Engineering

Lab exercise

Date: 16.03.2022

Code/Course	:	CSE3020 – Data Visualisation	Date	16.03.2022
Exercise	:	Visual Analytics using Tableau	Slot	L15+L16

Pre-requisite: Moderately familiar with basic concepts in Tableau, including data role, data connections and creating visual analytics in tableau.

Practical Exercise - I

Assume the given US State dataset, using this dataset do the visual analytics with respect to the following points and show your prediction results.

1. Do states with higher GDPs have higher Human Development Indexes? This graph will show that California has the highest real GDP, but not the highest GDP per capita. This distinction makes any difference?

2. Let's compare the 2010 real GDP with the Human Development Index for each state. It is instantly clear that CA has the highest GDP, but not the highest HDI. Connecticut and Massachusettes have the highest HDIs, but not the highest GDPs. They both have GDPs that are higher than the median GDP. But how will this change if we look at GDP per capita instead?

Practical Exercise – II

Using the *Sample-Superstore* dataset do the visual analytics with respect to the following points and show your prediction results.

3. What is the percent of total Sales for Home Office in July of 2013?

4. Find the customer with the lowest overall profit. What is his/her profit ratio?

5. Look at the sum of profits for each category. Which category is -$31,069 below the average profit across all categories?

Show the output in visual form using tableau as like.

3. What is the percent of total Sales for Home Office in July of 2013

4. Find the customer with the lowest overall profit. What is his/her profit ratio?

Guidance: The answer to this question can be found by looking at profits by customer and sort ascending by profit. Once you identify your customer contributing the least to your profits, add a profit ratio calculation to the label or tooltip.

5. Look at the sum of profits for each category. Which category is -$31,069 below the average profit across all categories?

Guidance: The answer to this question can be found by creating a table calculation looking at the sum of profit and subtracting from the window average (SUM([Profit])- WINDOW_AVG(SUM([Profit]))). Using the calculation in your view and applying the label will reveal the difference from average for each category.

Show the output in visual form using tableau.