## <u>CST2130 - Data Visualisation with Tableau</u> <u>Coursework for 2023 – 2024 Academic Session.</u>

**DATASET**: - Sales Dataset (included in the coursework Zipped file in My Learning area)

- 1. Customers in the Sales Dataset have been grouped according to the distance they commute (commute distance) to work. Create a visualisation to show the quantity of products ordered by each of these groups in all the Sales Territory Groups. Use the Sort feature to present your result in ascending order for each Sales Territory Group. Use the Caption feature to explain your findings in details. (15 marks)
- 2. Create a sorted visualisation to show which country (or countries) recorded the MOST and LEAST sales made by English customers of Professional, Manual and Skilled Manual occupations ONLY, in the years 2011 and 2013. Apply the Highlight feature. Use caption to explain your findings in details. (15 marks)
- 3. Using the relevant existing fields (except Total Product Cost), create a calculated field and name it Profit. This new field should hold the record for profit made on each sale after taking away all costs/expenses. Using this newly derived field (Profit), create a well labelled mapped visualisation to show which countries are making \$1 million or more in profit. Labelling must show country name and profit amount on the map. Apply the Highlight feature. Use caption to explain your findings in details. (15 marks)
- 4. Using a trend line as a mark, create a visualisation to show which Quarter of the year recorded the highest order quantity of all time. Use caption to explain the interesting similarity in the trends recorded in Quarters 2, 3 and 4 for all years. Explain how the trends in these three quarters differ from the trend in Quarter 1. (15 marks)
- 5. Create a visualisation to show the predicted Sales amount over the next three years. This forecast should be visualised in Year and Month only. Use caption to explain your findings in details. (10 marks)
- 6. Create a well labelled visualisation to show all time sum of profit made by the Regions. Keep only the regions of United Kingdom, France and Germany. (10 marks)
- 7. Create an interactive Dashboard to show all your visualisations in one place. Include the Middlesex University web Page URL in Dashboard. Your dashboard MUST have a Title and should contain Highlights. It should be well formatted to show clear difference between individual visualisations and should reflect your choice of channels such as colour and size used in your individual visualisations. (20 marks)



## NOTE:

- Use the Sales dataset provided in the coursework folder to attempt this coursework.
- Please take some time to explore and understand the dataset before starting your coursework.
- You can ask any questions regarding your coursework during lab sessions or via email.
- Create your join using the example shown in the image above for better results.
- Save your work as Tableau Packaged Workbook (\*.twbx). Saving your work as any other file type will attract penalty.
- This coursework is individual. Do NOT copy the work of someone else as this will be detected.
- Good use of Marks, channels, highlights, and filters will influence the mark for each question.
- Submission Deadline: Friday, 1st December 2023 at 23:59 hour.