T26

Figure 1: Student participation achieved a maximum rating (10/10) in May. There was an ascending trend (measured monthly) from the start of the year until May inclusive. A drop is recorded from May to June, the level maintains through July and slowly decreases in August. Nevertheless, it rises again but not at the maximum level in September and continues on a descending trend for the rest of the year, achieving a minimum of 1 in December. The participation of each student was measured each month and the mean was taken, resulting in one value for each month being displayed in a bar chart. Discrete data is data that only takes certain values. In this graph, the rating has values on a scale of 0-10 with no floating values. The possible values are finite. Hence the rating data is discrete data and numeric data.

Figure 2: Three different demand categories for sales of hand sanitiser i.e domestic use, exports, and tank truck spot, follow the same pattern and have synchronous trends. Overall, the three demand categories are on a slowly descending trend with a small rise before June 2019, then rising steeply around March 2020, which marks a date when the pandemic evolved significantly. Since March 2020, the following happen: tank truck spot sales start to rise significantly sooner than the rest, and the three different sales achieve similar gradients. At the end of March 2020, the highest number of sales is achieved by tank truck spot, exports, and domestic in this order.
A continuous graph shows trends over time better than a bar chart; in a bar chart the data of sales can be broken down into many many small pieces and the meaning of the variable does not change, however, it makes it more difficult to be visualised. Sales data is continuous data because sales can take on any value within a certain range. Also, sales data is numeric data.

Figure 3: The plots are grouped by continents (displayed in different colours).
Scatterplot shows larger points plotted for a bigger population size(defined within a range). Overall positive gradient shows a positive correlation between the two numerical variables i.e GDP per capita (independent variable) and CO2 emissions per capita (dependent variable). For each value of the population measured by GDP per capita (plotted on the x-axis) there is a value of CO2 emissions per capita plotted on the y-axis.