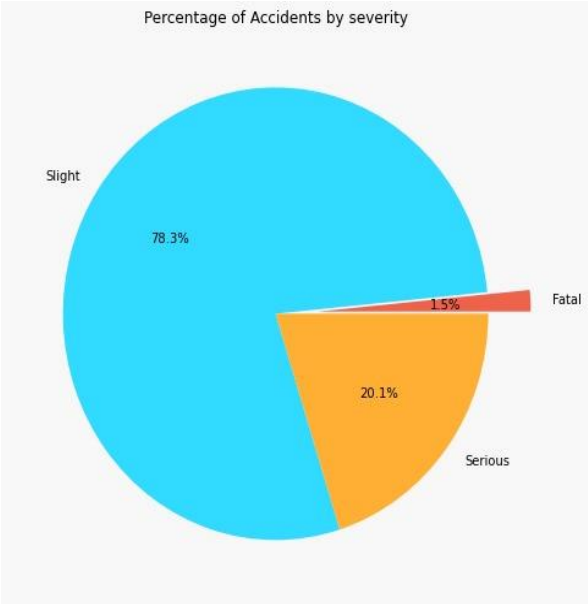
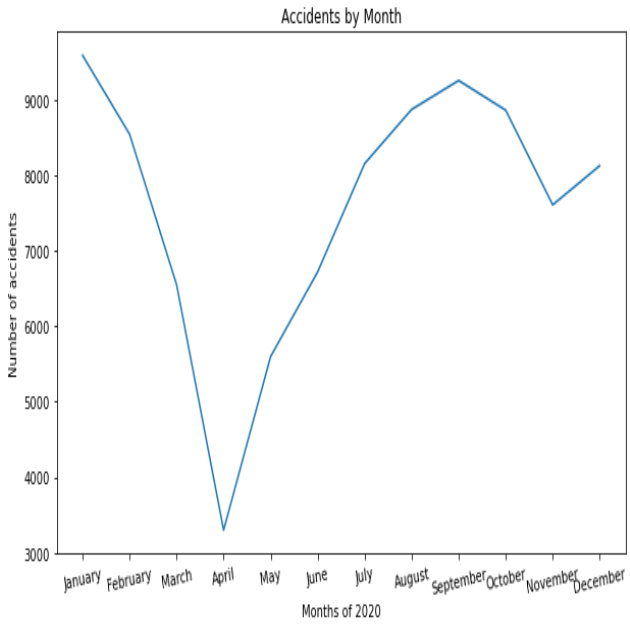
Analysing the Data on road Traffic accidents resulting in a casualty

The title of Data Source is "stats19" which the UK government published on the topic "road traffic accidents resulting in a casualty". It is available at https://data.gov.uk/dataset/cb7ae6f0-4be6-4935-927747e5ce24a11f/road-safety-data .These data sets are grouped into three categories: Road safety data on - Vehicles, Accidents and casualties. This analysis focus more on unearthing the interesting information from the dataset. In this report, I used Data visualisation technique to representing data in various elements such as graphs and charts. These visualisations can be useful in order to identify the trends, patterns and even the outliers of the data. I have considered carrying out the analysis graphically in order to have a clear picture of dataset at a glance.



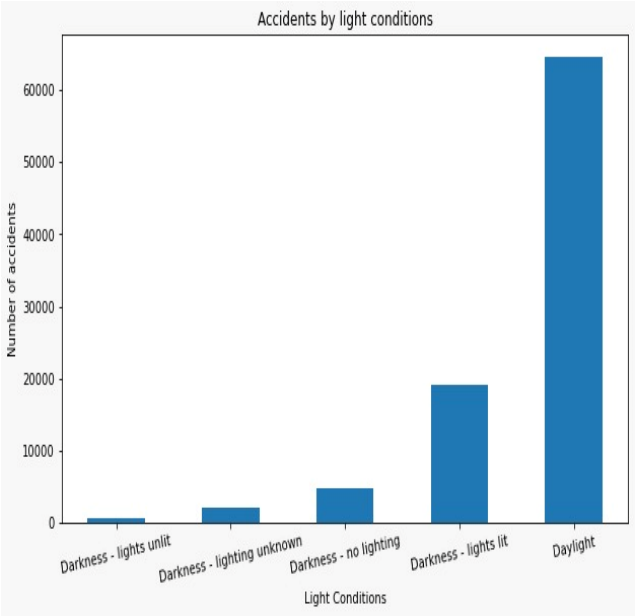


In this Pie chart, We can see that percentage of Accidents by severity results in Fatal was15% and serious severity was 20.1%, which was very less as compared to moderate(slight) Severity that is 78.3%.Possible causes of accidents are lacking using seat belt, drink-driving, holding and using mobile phone while driving, over-speeding, Running traffic signals.

The above line graph illustrates the accidents by Month. Number of Accidents represented on Y-axis and Months of 2020 Year on x-axis. In January, number of accidents was maximum, while number of accidents was minimum in April. From January to April, number of cases decreases. In January number of accidents more than 9000, whereas in April Accidents reduced and became around 3200. However, Between April and September, number of accidents increased and became 9000 in September. September had second maximum data for accidents. Again, we can see change in number of accidents. It decreases till November and became 7500. From November to December, accidents increases by 500.

	Road Condition	Accident Count
0	Snow	150
1	Flood over 3cm. deep	184
2	Frost or ice	764
3	Wet or damp	26240
4	Dry	62698

Table represents the data of road accidents in Year 2020 due to Road conditions. Number of accidents was minimum for snow road condition that is 150 while the data maximum for Dry Road Condition which is 62698. For snow and Flood over 3cm. deep, the accident count was nearly same. For Frost or ice , Wet or damp and Dry , the number of accidents was 764, 26240 and 62698 respectively.



The bar graph shows the number of accidents because of different Light condition. Number of accidents was maximum in Daylight that is more than 6000, while accidents was minimum in Darkness-lights unit which is around 100. Data for lighting unknown and no lighting was more than lights unit that is around 200 and 500 respectively. In addition to this, Number of accidents for lights lit was 2000 which was less than daylight accidents.

The stats19 is a rich and useful dataset for a country like UK . The data set I worked on might be of public interest because the data set collects information about a particular issue in society. The public interest to know the severity, the frequency, the days, and the places of the accidents might help the society to measure and answer some questions that they could come up with. People can notice that an accident could change their lives in different ways. These changes go from an economic loss to death. Therefore, people might want to answer questions like What kind of accidents are more frequently? Are the accidents usually in my local area? Which gender is more likely to be involved in an accident? Which age group has the highest number of accidents? These are some of the questions that people would like to answer if they have access to the information about accidents roads and casualties.