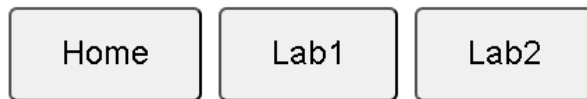


### **Lab 3**

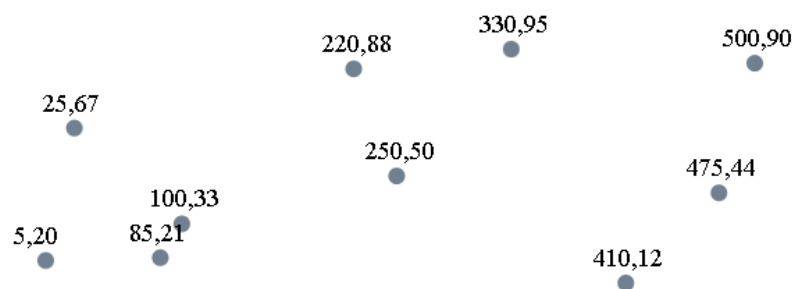
#### Lab Task 3.1

<https://cylim1507.github.io/COS30045/COS30045/lab3/lab3-1.html?>

<https://github.com/Cylim1507/COS30045/blob/main/COS30045/lab3/lab3-1.html>



### **The D3 journey starts here...**



COS30045 Data Visualisation  
Lim Chi Yuen

#### Lab Task 3.2

<https://cylim1507.github.io/COS30045/COS30045/lab3/lab3-2.html>

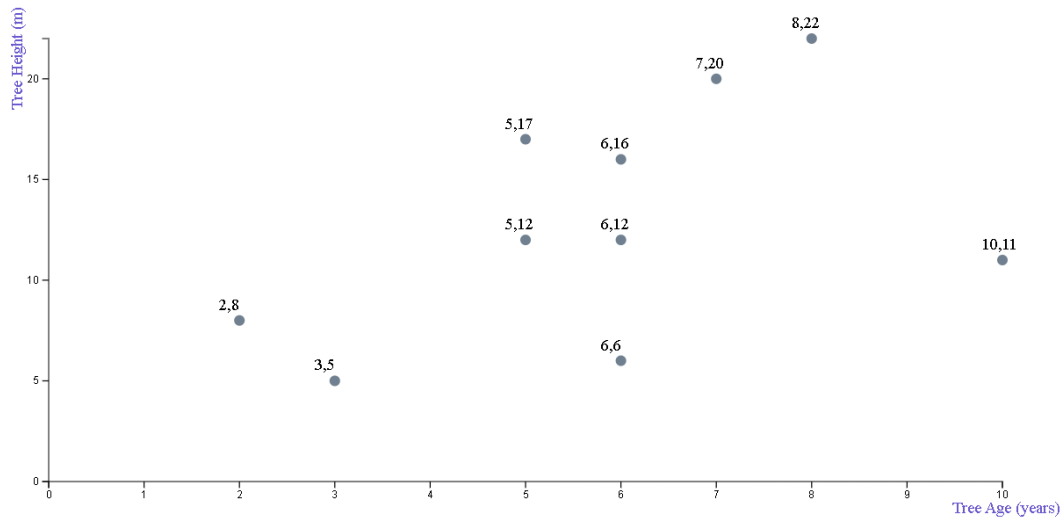
<https://github.com/Cylim1507/COS30045/blob/main/COS30045/lab3/lab3-2.html>

Home

Lab1

Lab2

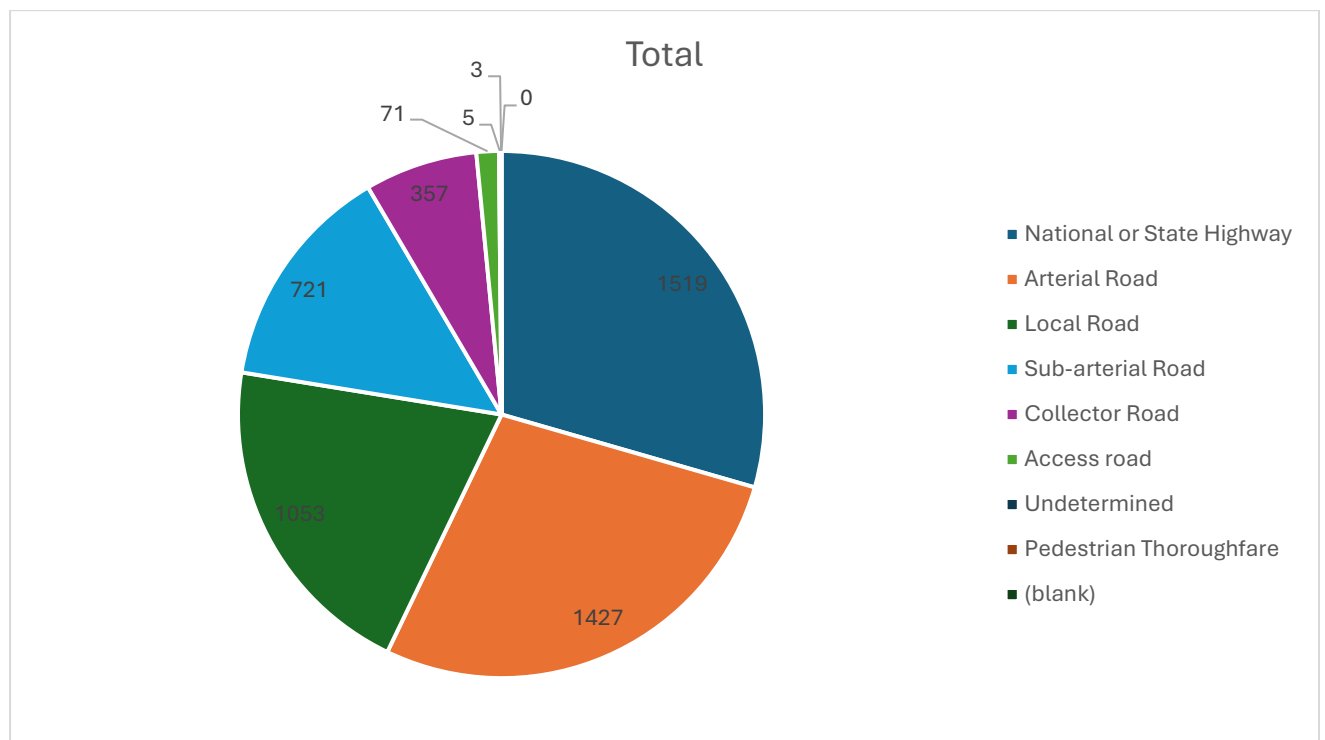
The D3 journey starts here...



The following is a modified version of original Lab3-2 with axis label

COS20046 Data Visualization

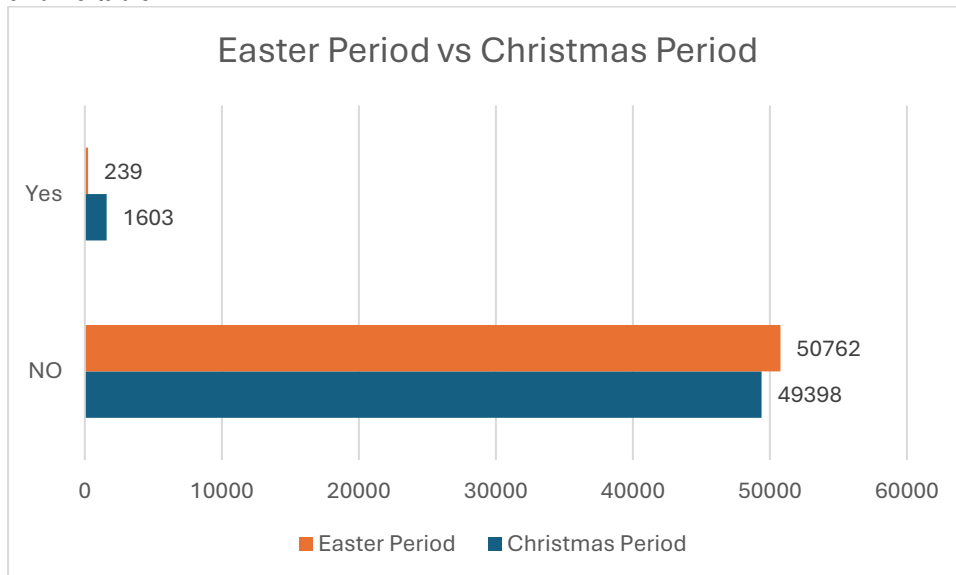
## Lab Task 4.1



The area where accident occurs the most is at National or State Highway which takes up almost 30% of the pie chart. The second comes from Arterial Road, which also takes up 28% of the pie chart. The third most accident occurs road type is Local road which is 20% of the pie chart. The total of the top 3 road types where accident tends to occur the most occupied 78% of the pie chart. The other 22% are made up from other 5 road types.

## Does Christmas or Easter tends to have car accident?

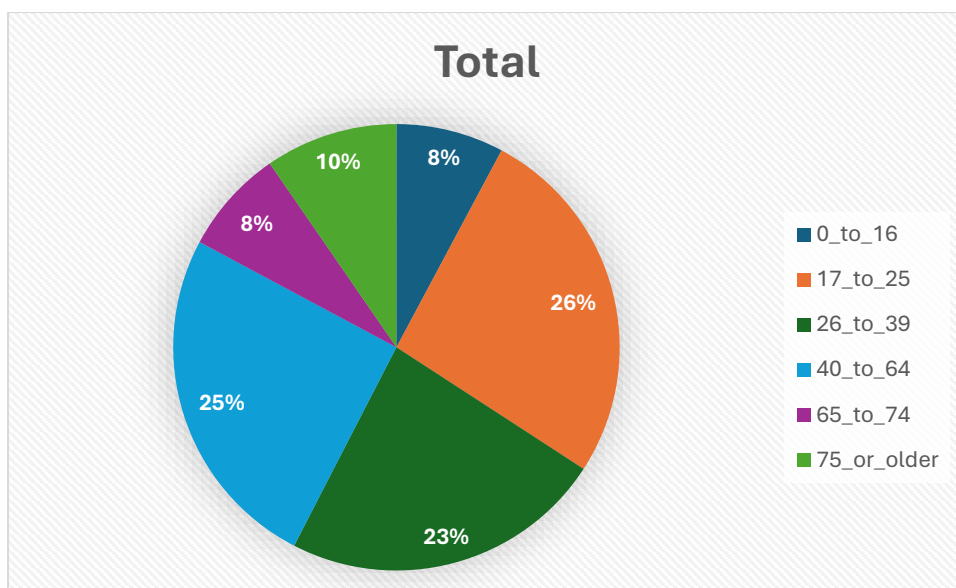
The data I need is Christmas period and Easter period. I need to transform the yes and no data for the periods into the count of yes and no into another table. After transforming the data into the count of yes and no table.



As you can see, The orange bar represents the Easter Period and the blue bar represents Christmas Period. As you can see the accident happen in Christmas is more than accident in Easter. Accident happen at Christmas is at least 6 times of accident happen in Easter. This result shows that during Christmas Period, accident will occurs more than Easter Period.

## What is the age range that tends to cause accident?

I need to extract column Age Group. It is a categorical data, but after transformation of data it change to ordinal data. The new table shows the count for the categories



The above pie chart show the percentage age group that is in the car accident. The total of car accident is 50917. The age group 17 to 25 consist 26%, which is the most percentage in the pie chart. Second most percentage is 25%, for age 40 to 64. The category are not synchronized, so some data have a bigger range compare to others. The age group 40 to 64 have a much bigger range compare to 17 to 25, this prove that the age group 15 to 25 did have many accident. The third most percentage is age group 26 to 39, which contain 23%. This age group(26 to 39) have a lesser range compares to age group 40 to 64, which might be why age group 26 to 39 is lesser than age group 26 to 39. The top three of the pie chart already taken 74% of the graph. The other three age group are 0 to 16 - 8% , 65 to 74 - 8%, and 75 or older – 10%. The age group 75 or older maybe be cause by the oldness of the driver, and therefore the accident is quite high.