# COS30045

# LAB 4.1 Design Studio

#### Overview

In this lab you will be given a sample data set and asked to identify the different data and attribute types. You will also think about some questions about this data set that might be answered by a visualisation.

ardd\_fatalities\_Jan2020\_0.xlsx (download from Canvas)

Download and review this data set before attempting this exercise.

## 1 Interpreting the data set

Complete the LAB 4.1 Quiz.

## 2 Visualisation Design

Think of three questions you would like to answer with that require a data visualistion.

For each data question you will need to consider the following:

Which data attributes (columns) do you need to answer this question?

Do you need to transform any of the data?

Does the data type change when you transform the data? If so how.

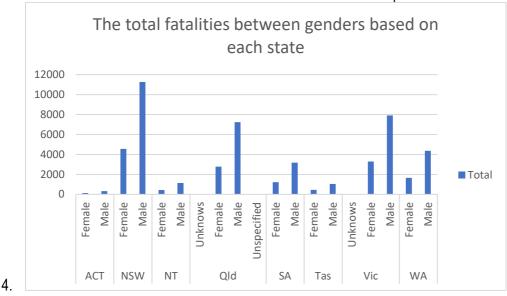
Make a sketch of how you think your visualisation might look and add to this document.

#### Your Question 1

Example. What are the total fatalities of Rigid Trucks vs Articulated Trunk? Provides a bar chart. Compares.

What are the total fatalities between genders based on each state? Your answer here...

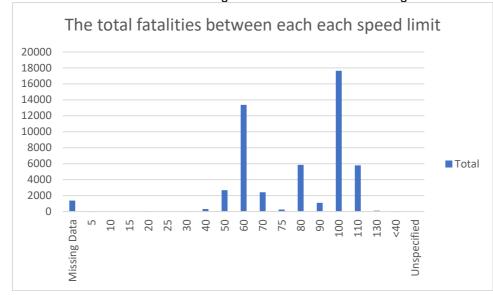
- 1. State, Gender, and Count of State are used to create this table.
- 2. The State and Gender are used as Rows and need to count the state in value.
- 3. There are no data transformations needed because the data is pre-defined.



#### Your Question 2

Your answer here

- 1. Crash ID and Speed Limit are used to create this table.
- 2. The Speed Limit is used as an Axis, and the Crash ID needs to be counted in values.
- 3. The -9 has been modified to "Missing Data" for better understanding.

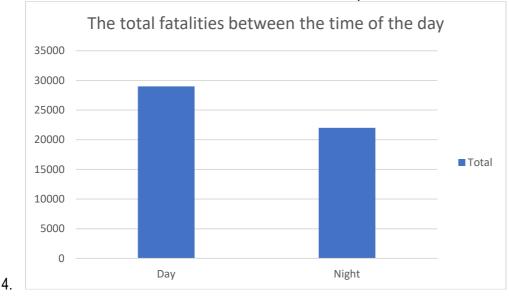


4.

# Your Question 3

#### Your answer here

- 1. Crash ID and Time of Day are used to create this table.
- 2. The time of the day is used as an axis, and the Crash ID needs to be counted in values.
- 3. No data transformations are needed because the data is predefined.



Include this file as evidence for your Demonstration 2