School of Science, Computing and Engineering Technologies

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?

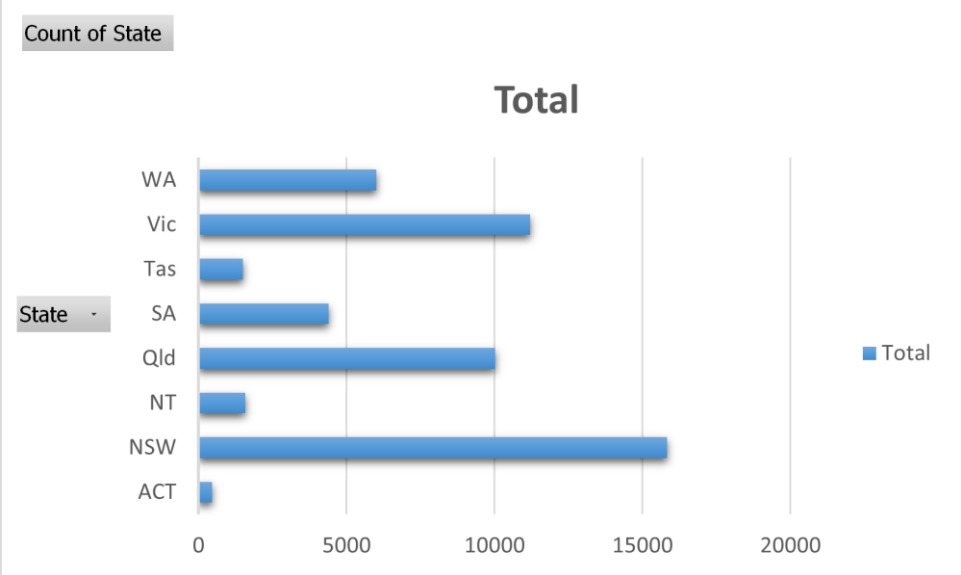
Does the data type change when you transform the data? If so how.

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

Your Question 1

Row Labels	Count of State
ACT	462
NSW	15832
NT	1586
Qld	10021
SA	4391
Tas	1494
Vic	11205
WA	6010
Grand Total	**51001**

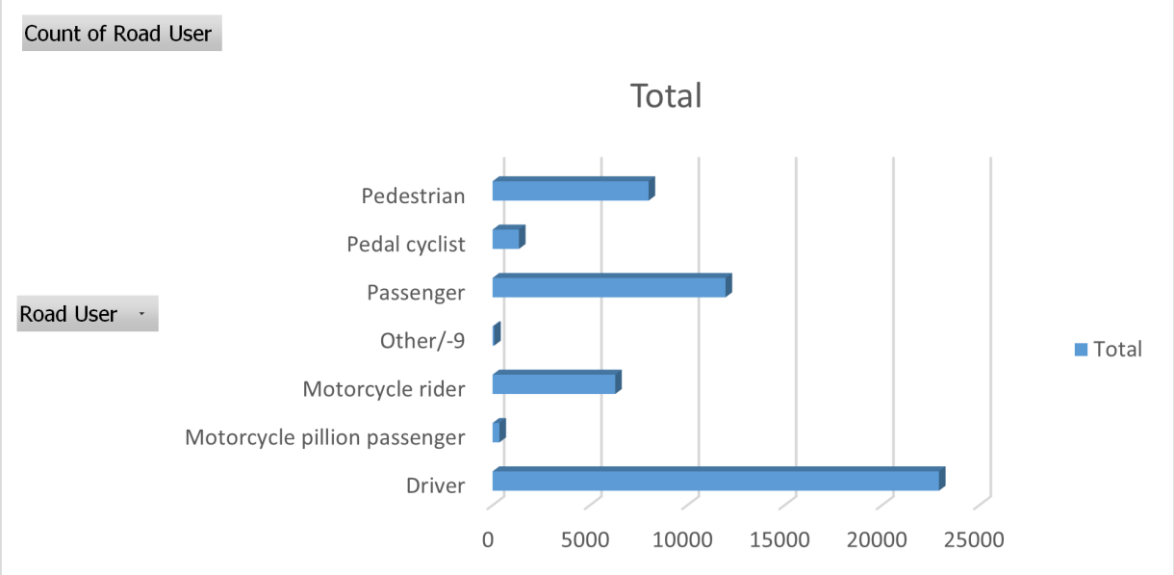
I used “State” to show the total count for each state.
No, I don’t need to transform any of the data since I only differentiate the different state which is ACT, NSW,NT, Qld, SA, Tas, Vic and WA.
No, the data type won’t change because I don’t transform the data.



Your Question 2

Row Labels	Count of Road User
Driver	22931
Motorcycle pillion passenger	351
Motorcycle rider	6300
Other/-9	81
Passenger	11969
Pedal cyclist	1355
Pedestrian	8014
Grand Total	**51001**

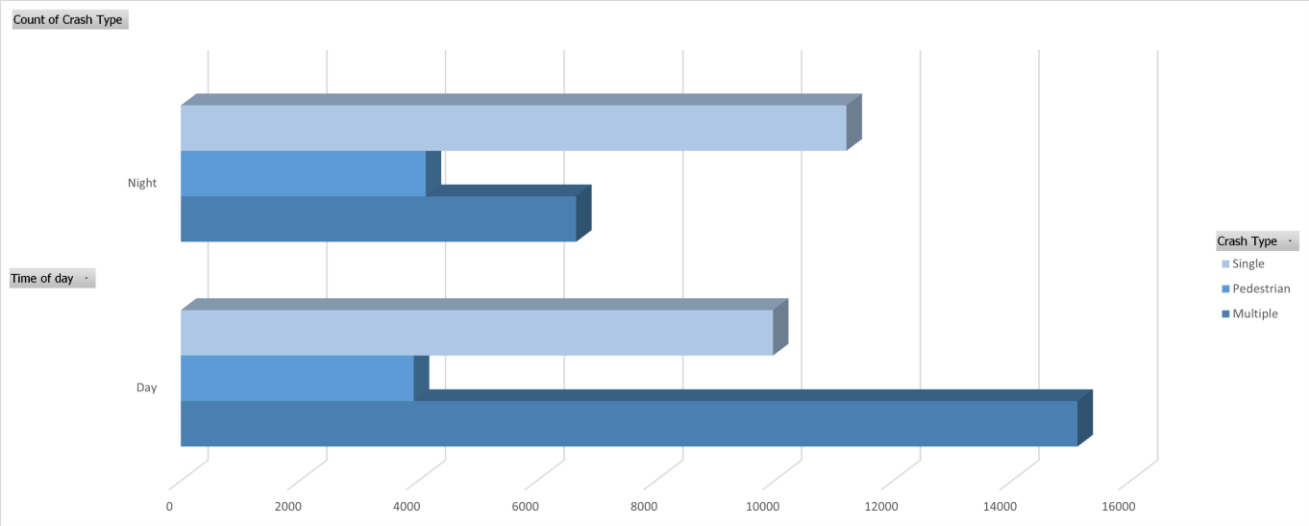
I used “Road User” to show the total count for each type of road user.
No, I don’t need to transform any of the data since I only differentiate the different road user which is driver, motorcycle pillion passenger, motorcycle rider, passenger, pedal cyclist, pedestrian, and other.
No, the data type won’t change because I don’t transform the data.



Your Question 3

Count of Crash Type	Column Labels			
Row Labels	**Multiple**	**Pedestrian**	**Single**	**Grand Total**
Day	15105	3923	9976	29004
Night	6659	4124	11214	21997
Grand Total	**21764**	**8047**	**21190**	**51001**

I used “Crash Type” and “Time of Day” to show the total count for each crash type during day or night.
No, I don’t need to transform any of the data since I only differentiate the crash type which is multiple, pedestrian and single during day and night.
No, the data type won’t change because I don’t transform the data.



Include this file as evidence for your Demonstration 2