

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 visualisation.

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

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

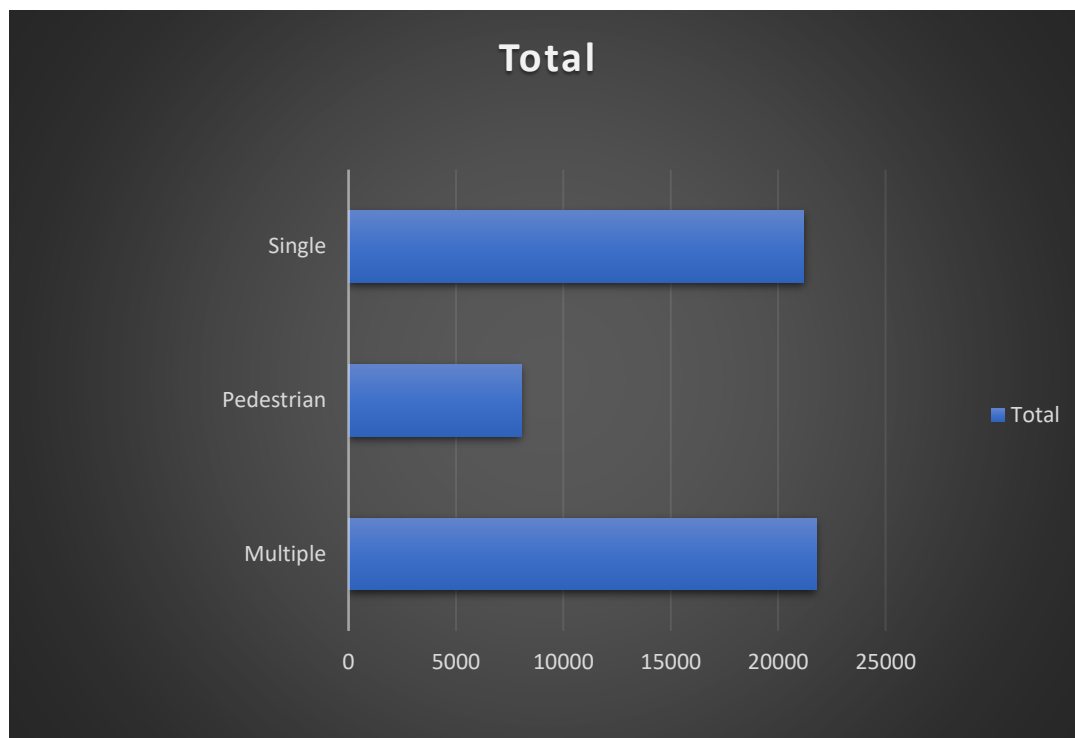
Do you need to transform any of the data?

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.

Question 1

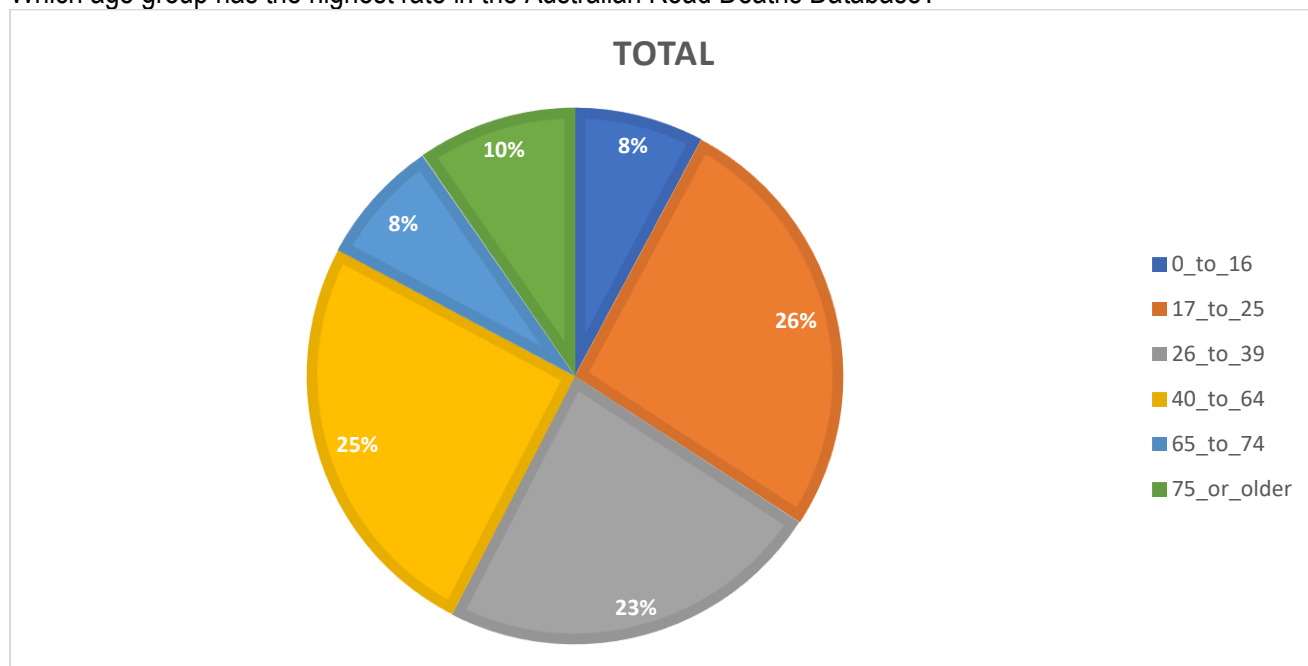
According to the Crash Type, what are the total for multiple, single and pedestrian?



According to the bar chart and pivot table above, I used Crash Type column to answer this question. I do not need to transform any data because there is the direct data shown in the column. All I need to do is to separate three data which are single, pedestrian and multiple. The data remains the same because I do not transform any data.

Question 2

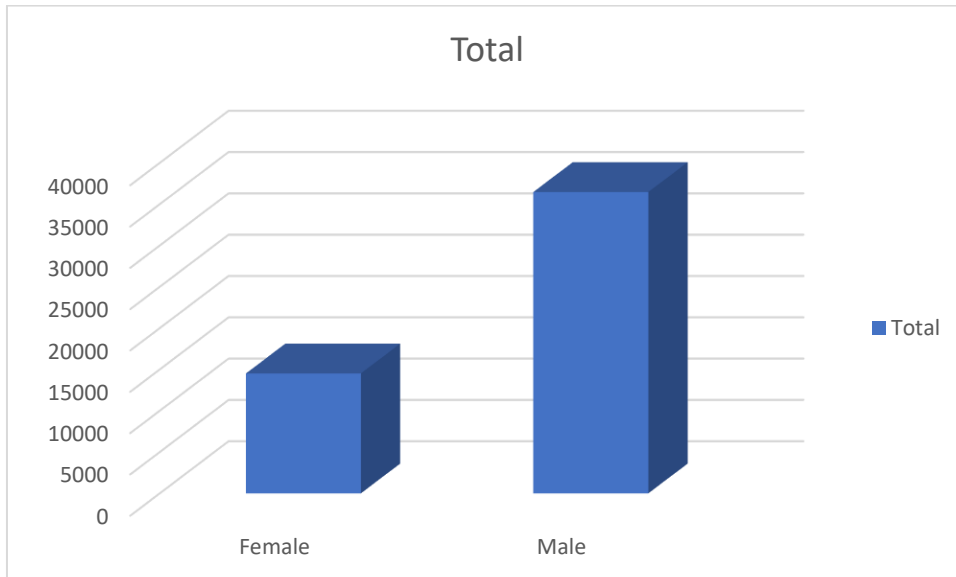
Which age group has the highest rate in the Australian Road Deaths Database?



According to the pie chart and pivot table above, I used Age Group column to answer this question. I do not need to transform any data because there is the direct data shown in the column. All I need to do is to separate the data for age group to make people clearer for the data. The data remains the same because I do not transform any data. The unknown number which is the -9 already been remove from the table

Question 3

Based on some stereotype sense, is it true that the percentage for female involved in the accident higher than male?



According to the bar chart above, it shows that the percentage for male involved in the accident is higher. However, I used the gender column to answer this question. Transform any of the data is not required for this question.