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STAT 324

Final Paper

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For this paper, I decided to investigate the Seatbelts dataset, which explores road casualties in the United Kingdom from 1969 – 1984. At first, I was interested how the number of drivers killed changed over the years. To do this, I used plot.scatter() to make a scatterplot of these two variables, which resulted in this graph:

A graph of dots and numbers

Description automatically generated with medium confidence

Looking at the scatter plot, there seemed to be a slight negative correlation between time and driver deaths, which made sense as seatbelts were introduced in 31 Jan 1983. To verify this, I used cor() to get the correlation between these two variables, which resulted in about -0.33, which is a weak negative correlation.

My next question was to check how the proportion of front-seat deaths to back-seat deaths changed over time. I used the same command and got this graph:

A graph of dots and numbers

Description automatically generated with medium confidence

There seems to be a sharp negative decline in front-seat deaths compared to back-seat deaths around the time seat-belts are introduced, which makes sense.