Project

Analyse the changes in Formula One safety.

1. Has the rate of injury due to accidents in Formula One events decreased over time?
2. Show the number of driver injuries relative to the number of race participants.
3. Show the number of accidents/collisions over time and compare this to the number of injuries.

For all 3 questions Data was sourced via the Kaggle website. This was chosen as it gave us a complete collection of data covering every year of Formula One (1970-2022). The dataset was broken into 14 individual datasets.

I chose the relevant datasets required for each of the three questions and loaded these into my notebooks and merged them together. All relevant columns were brought together into a single dataframe for each of the three notebooks

1. The injury data was cleaned and brought together so that it could be arranged and sorted easily by year.

A chart was created that visualised the number of injuries per season.

1. The drivers entered per race data was brought together and put together with the injury data.

A chart was created that visualised the number of entrants per race and compared with the number of injuries.

1. Similar to how I was able to clean the data and merge information together to find the injury data per season I was able to bring together the data to find the number of accidents/collisions per season.

Overall, I would say that the results were not as I would have expected. My expectations were that there would have been a much higher rate of injuries in the early years and decades compared to the more modern cars and safety features.

Accidents v injuries do show a reduction of accidents over time since the late 1970’s through to the most recent season in 2022.