

```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
```

```
car_crashes_data = sns.load_dataset('car_crashes')
```

```
car_crashes_data
```

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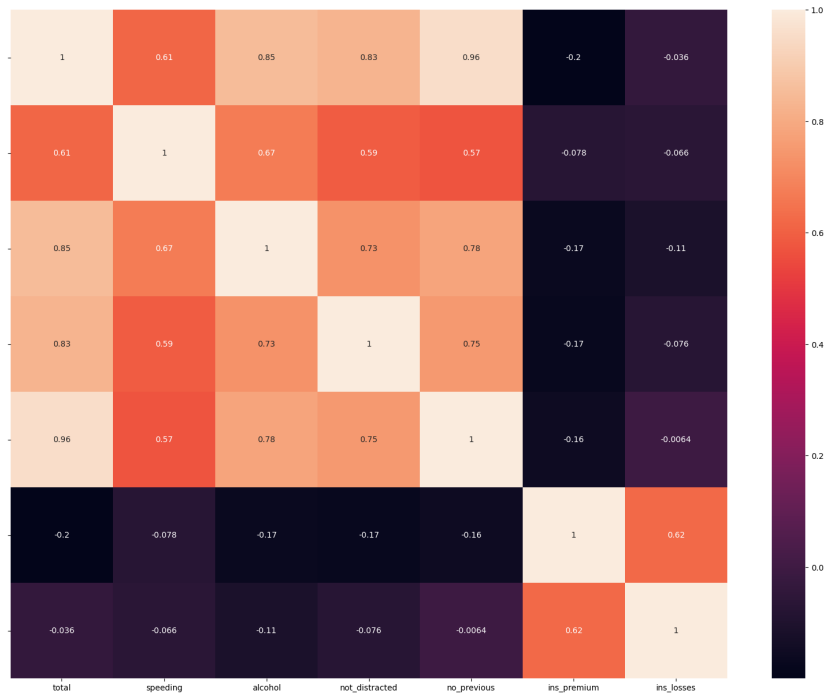
	total	speeding	alcohol	not_distracted	no_previous	ins_premium	ins_losses
0	18.8	7.332	5.640	18.048	15.040	784.55	145.08
1	18.1	7.421	4.525	16.290	17.014	1053.48	133.93
2	18.6	6.510	5.208	15.624	17.856	899.47	110.35
3	22.4	4.032	5.824	21.056	21.280	827.34	142.39
4	12.0	4.200	3.360	10.920	10.680	878.41	165.63
5	13.6	5.032	3.808	10.744	12.920	835.50	139.91
6	10.8	4.968	3.888	9.396	8.856	1068.73	167.02
7	16.2	6.156	4.860	14.094	16.038	1137.87	151.48
8	5.9	2.006	1.593	5.900	5.900	1273.89	136.05
9	17.9	3.759	5.191	16.468	16.826	1160.13	144.18
10	15.6	2.964	3.900	14.820	14.508	913.15	142.80
11	17.5	9.450	7.175	14.350	15.225	861.18	120.92
12	15.3	5.508	4.437	13.005	14.994	641.96	82.75
13	12.8	4.608	4.352	12.032	12.288	803.11	139.15
14	14.5	3.625	4.205	13.775	13.775	710.46	108.92
15	15.7	2.669	3.925	15.229	13.659	649.06	114.47
16	17.8	4.806	4.272	13.706	15.130	780.45	133.80
17	21.4	4.066	4.922	16.692	16.264	872.51	137.13
18	20.5	7.175	6.765	14.965	20.090	1281.55	194.78
19	15.1	5.738	4.530	13.137	12.684	661.88	96.57
20	12.5	4.250	4.000	8.875	12.375	1048.78	192.70
21	8.2	1.886	2.870	7.134	6.560	1011.14	135.63
22	14.1	3.384	3.948	13.395	10.857	1110.61	152.26
23	9.6	2.208	2.784	8.448	8.448	777.18	133.35
24	17.6	2.640	5.456	1.760	17.600	896.07	155.77

```
plt.subplots(figsize=(20,15))
corr=car_crashes_data.corr();
sns.heatmap(corr,annot=True)
```

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```
python-input-5-94a6c333147b>:2: FutureWarning: The default value of numeric_only i  
corr=car_crashes_data.corr();  
axes: >
```

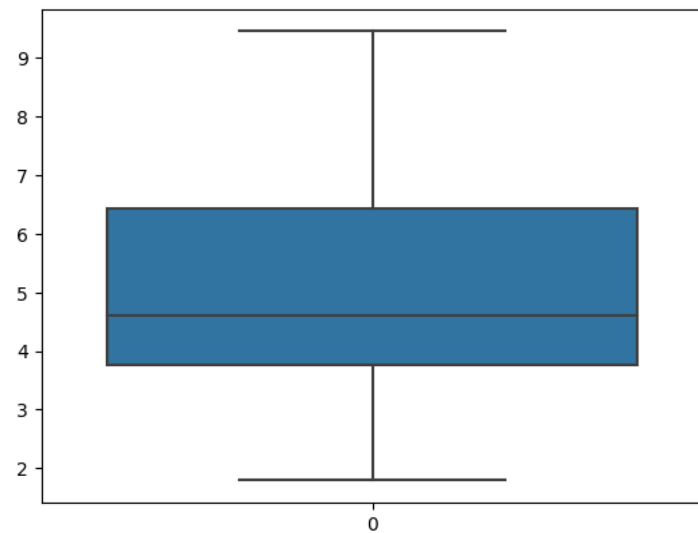


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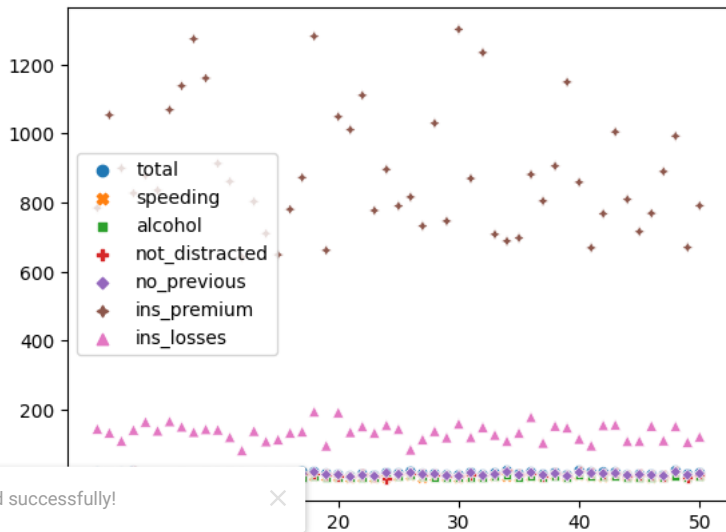
```
sns.boxplot(car_crashes_data.speeding)
```

<Axes: >



```
sns.scatterplot(car_crashes_data)
```

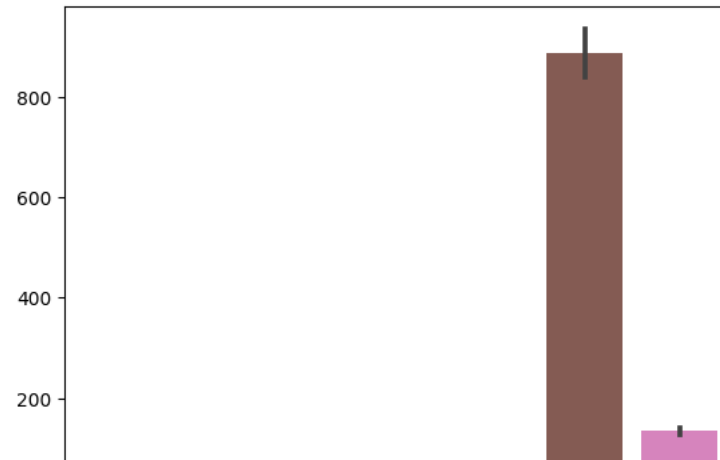
<Axes: >



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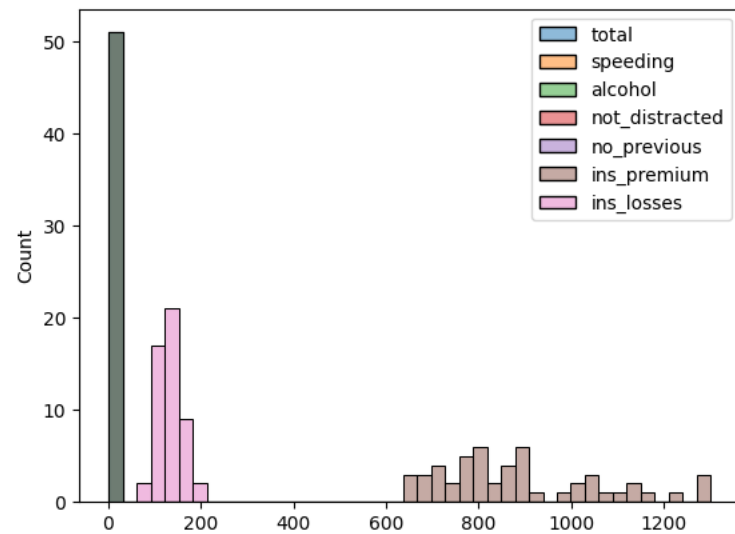
```
sns.barplot(car_crashes_data)
```

<Axes: >



```
sns.histplot(car_crashes_data)
```

<Axes: ylabel='Count'>



```
sns.countplot(car_crashes_data)
```

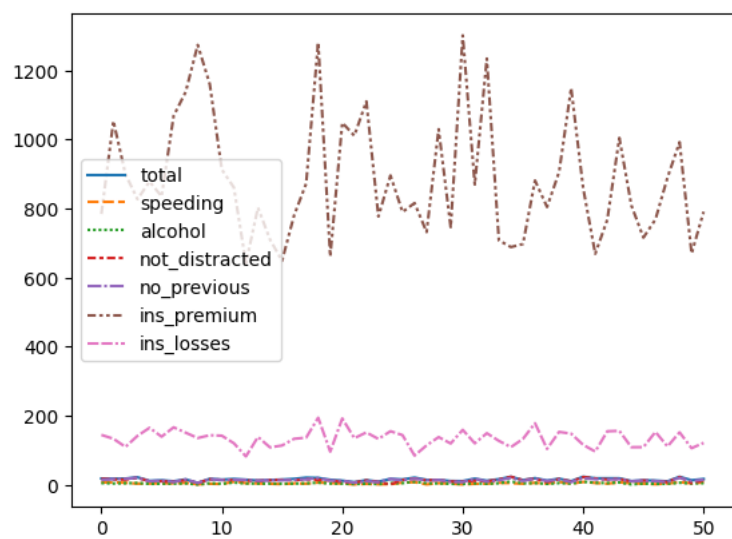
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<Axes: ylabel='count'>

`sns.lineplot(car_crashes_data)`

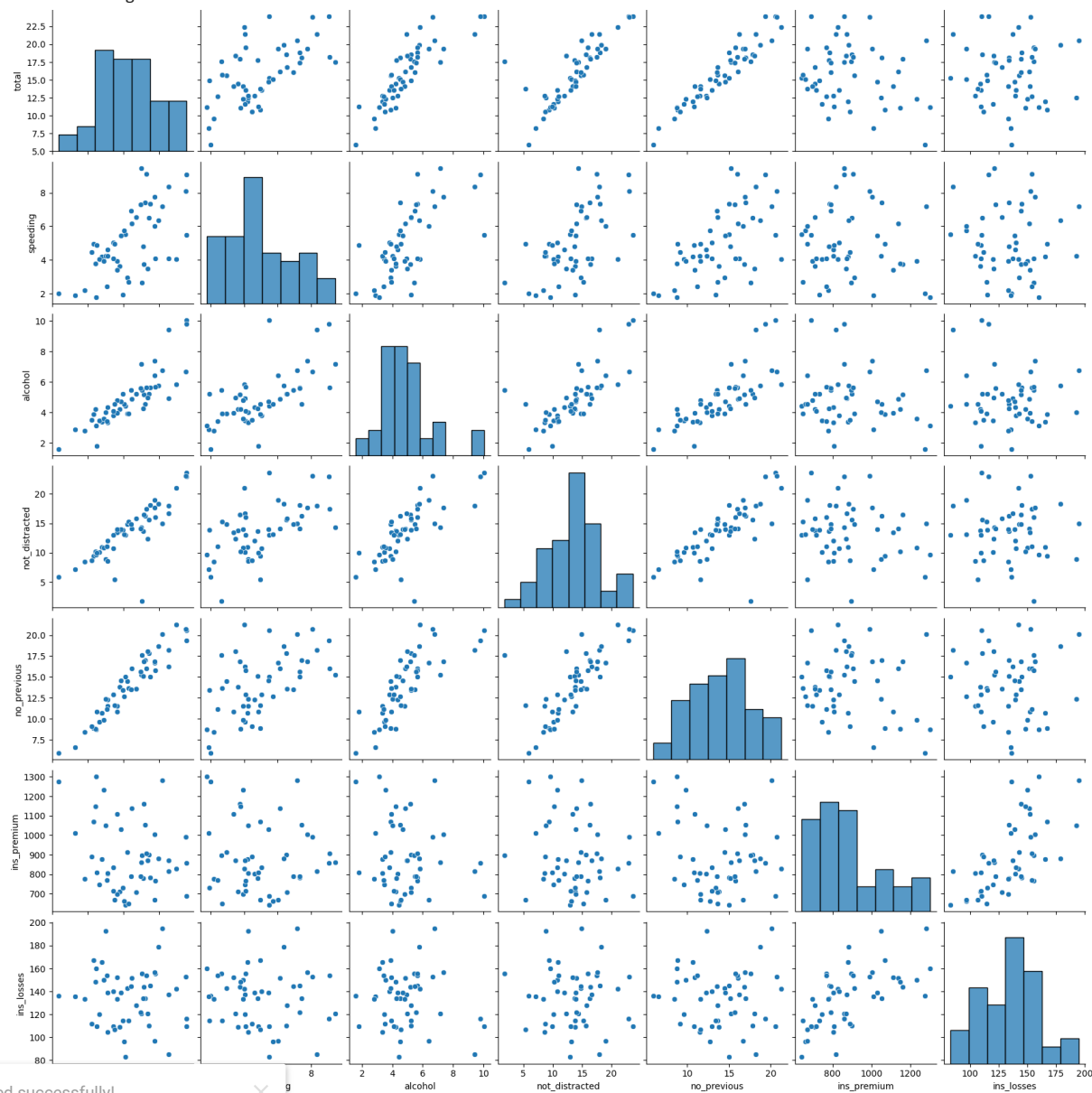
<Axes: >

`sns.pairplot(car_crashes_data)`

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<seaborn.axisgrid.PairGrid at 0x7b898e67df90>



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New Section

Heatmap of Correlation Matrix: The heatmap reveals the correlation between different features in the dataset. Features with darker colors indicate higher correlations. For instance, there is a strong positive correlation between 'alcohol' and 'no_previous,' suggesting that states with higher alcohol consumption tend to have more drivers with no previous accidents. Conversely, 'ins_losses' and 'ins_premium' have a negative correlation, implying that states with higher insurance losses tend to have lower insurance premiums.

Box Plot of 'speeding' Column: The box plot illustrates the distribution of the 'speeding' variable. This suggests that speeding rates tend to be consistent across the states represented in the dataset.

Scatter Plot of 'total' vs. 'speeding': The scatter plot does not reveal a clear relationship between 'total' and 'speeding.' There is no apparent trend

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