

▼ P. Siva Sankar Sai Prasad

21BAI1283

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

```
from google.colab import drive
drive.mount('/content/drive')
```

```
df = pd.read_csv("/content/drive/MyDrive/AI ML Course/car_crashes.csv")
df.head()
```

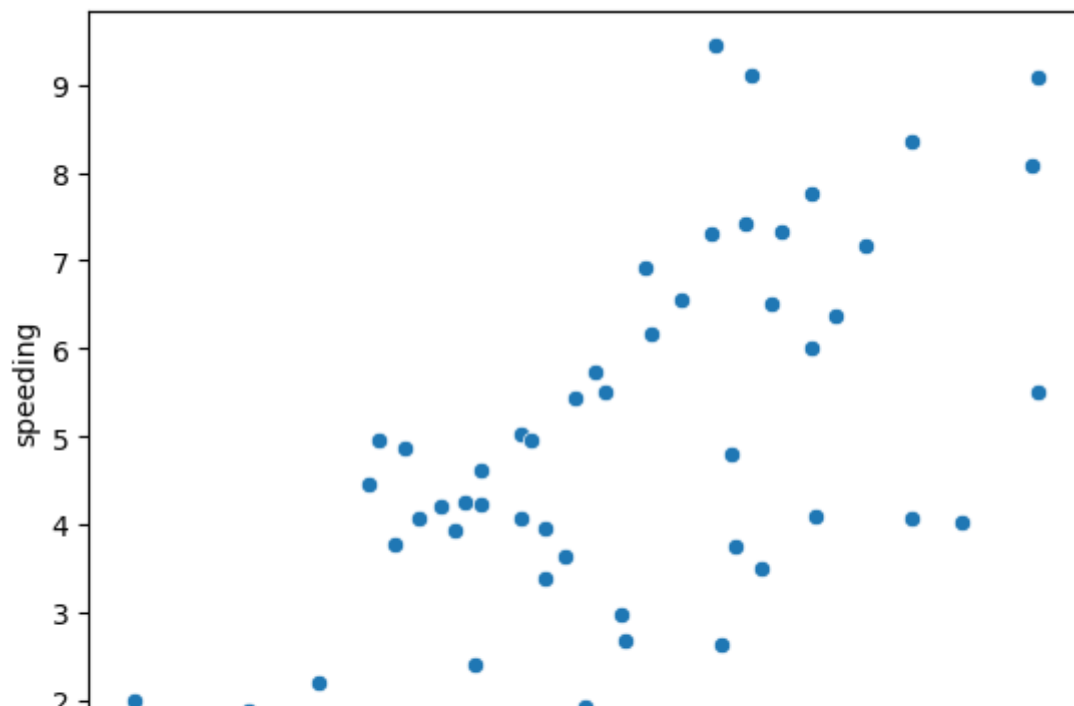
	total	speeding	alcohol	not_distracted	no_previous	ins_premium	ins_losses	ab
0	18.8	7.332	5.640	18.048	15.040	784.55	145.08	
1	18.1	7.421	4.525	16.290	17.014	1053.48	133.93	
2	18.6	6.510	5.208	15.624	17.856	899.47	110.35	
3	22.4	4.032	5.824	21.056	21.280	827.34	142.39	
4	12.0	4.200	3.360	10.920	10.680	878.41	165.63	

```
df.tail()
```

	total	speeding	alcohol	not_distracted	no_previous	ins_premium	ins_losses	a
46	12.7	2.413	3.429	11.049	11.176	768.95	153.72	
47	10.6	4.452	3.498	8.692	9.116	890.03	111.62	
48	23.8	8.092	6.664	23.086	20.706	992.61	152.56	
49	13.8	4.968	4.554	5.382	11.592	670.31	106.62	
50	17.4	7.308	5.568	14.094	15.660	791.14	122.04	

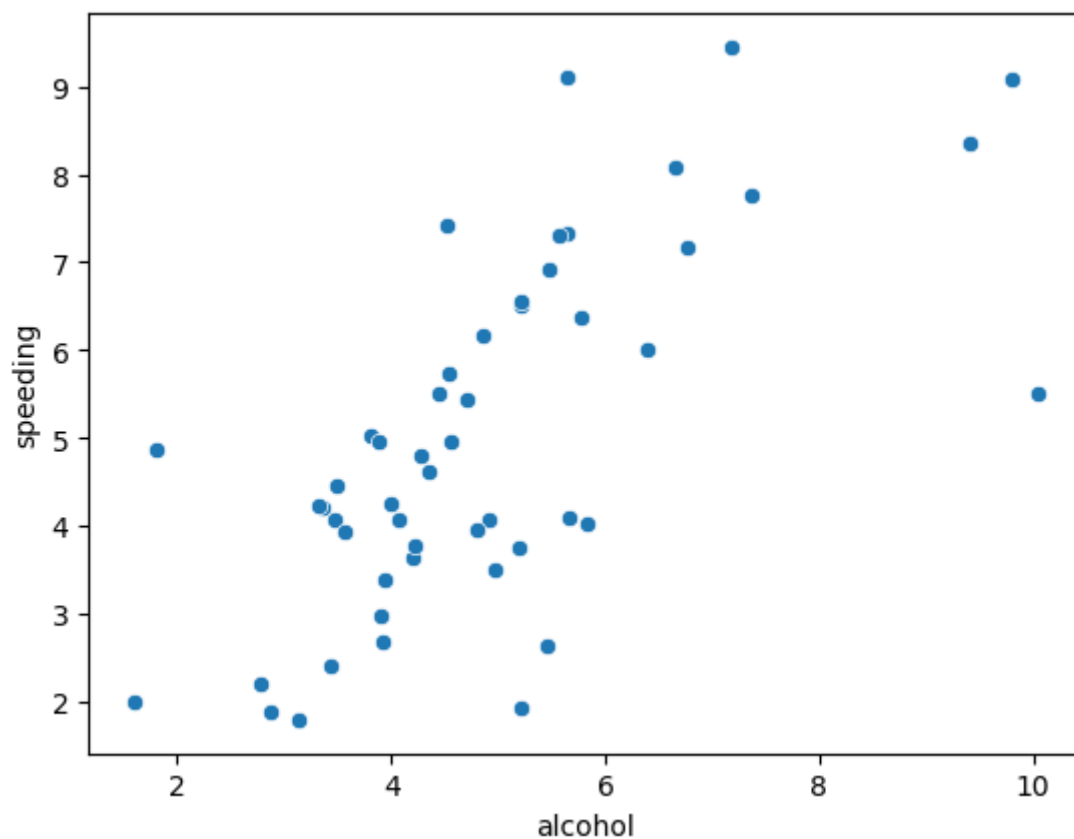
```
sb.scatterplot(x = "total", y = "speeding", data = df)
```

<Axes: xlabel='total', ylabel='speeding'>



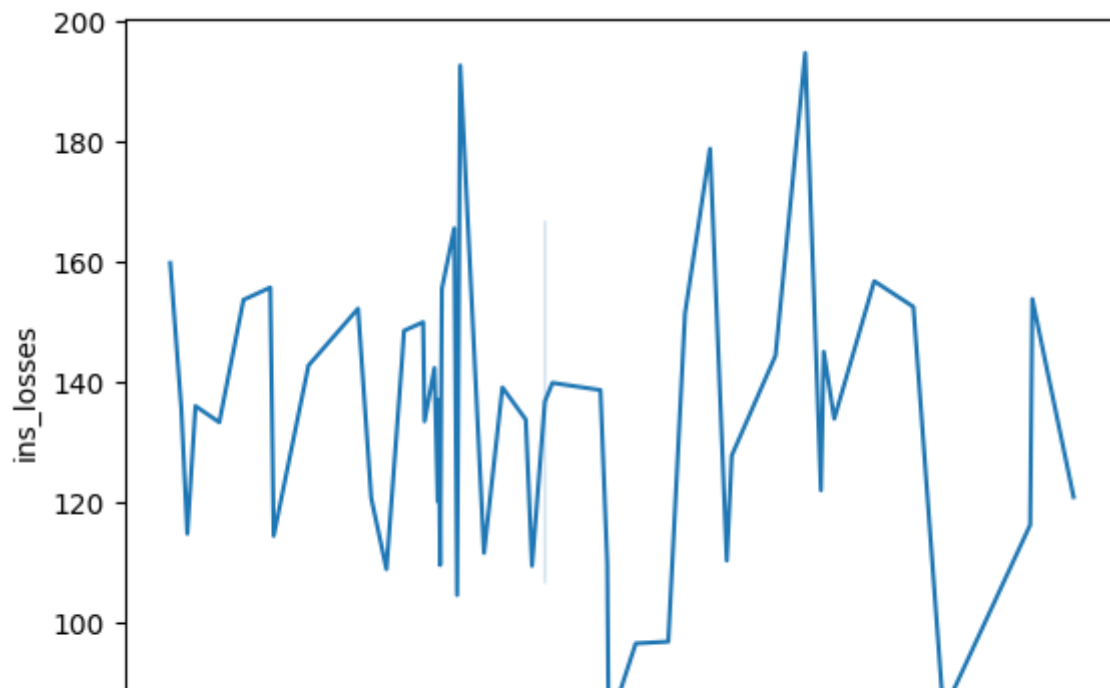
```
sb.scatterplot(x = "alcohol", y = "speeding", data = df)
```

<Axes: xlabel='alcohol', ylabel='speeding'>



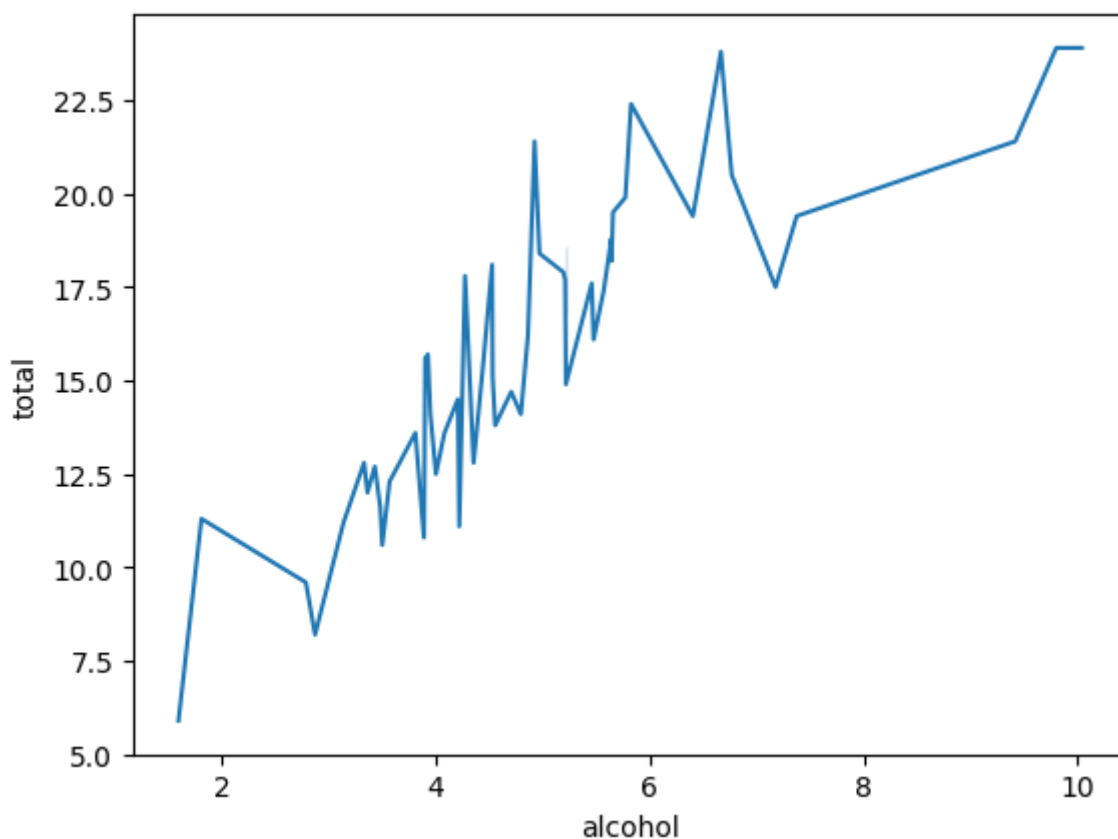
```
sb.lineplot(x = "speeding", y = "ins_losses", data = df)
```

<Axes: xlabel='speeding', ylabel='ins_losses'>



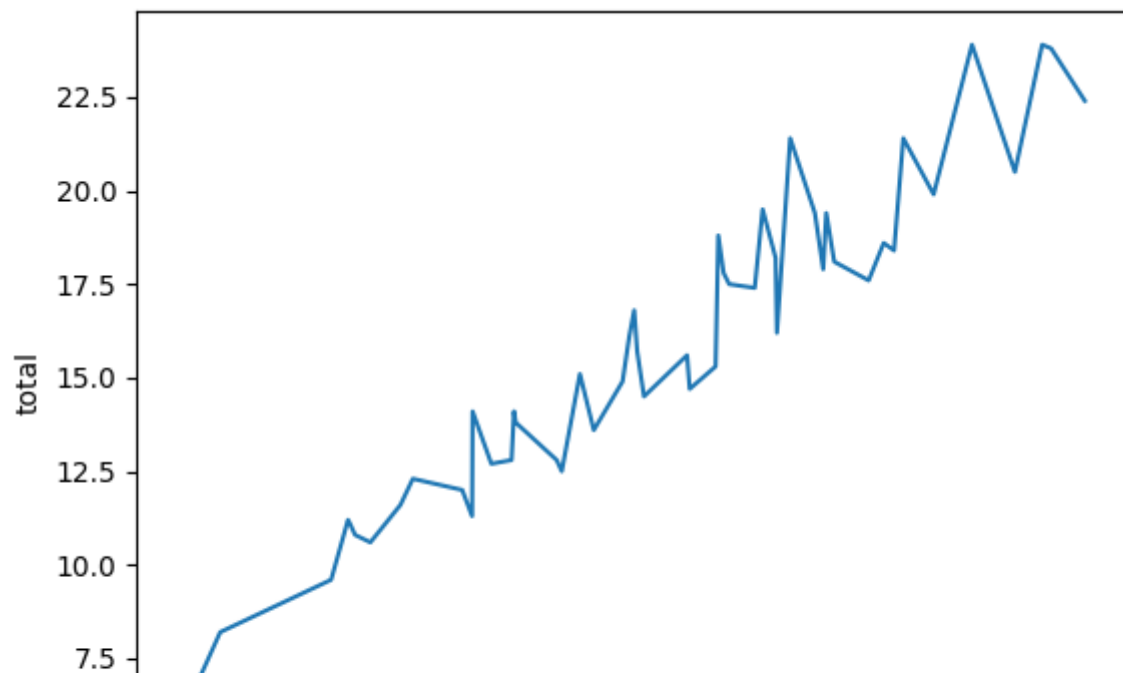
```
sb.lineplot(x = "alcohol", y = "total", data = df)
```

<Axes: xlabel='alcohol', ylabel='total'>



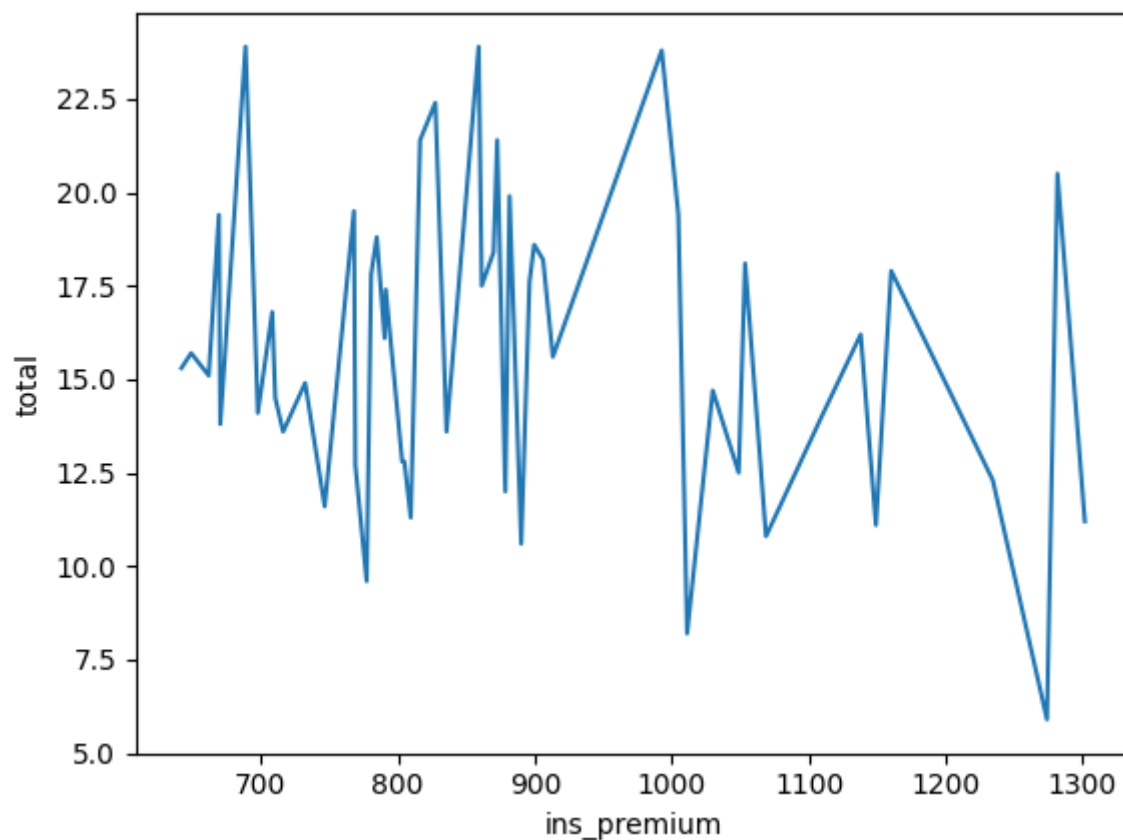
```
sb.lineplot(x = "no_previous", y = "total", data = df)
```

<Axes: xlabel='no_previous', ylabel='total'>



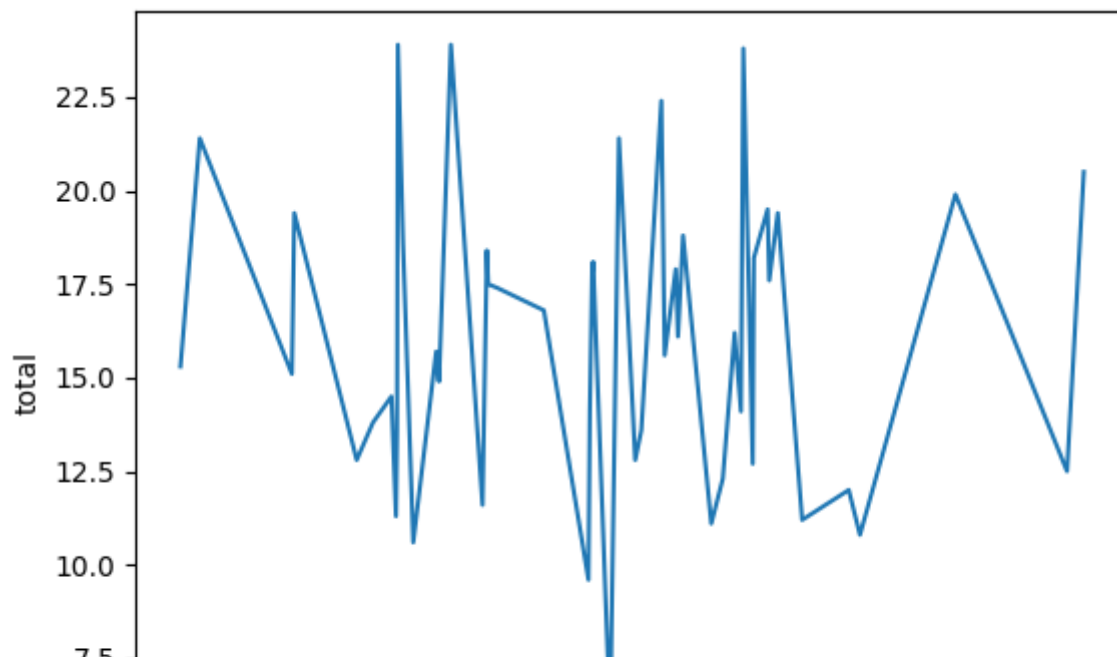
```
sb.lineplot(x = "ins_premium", y = "total", data = df)
```

<Axes: xlabel='ins_premium', ylabel='total'>



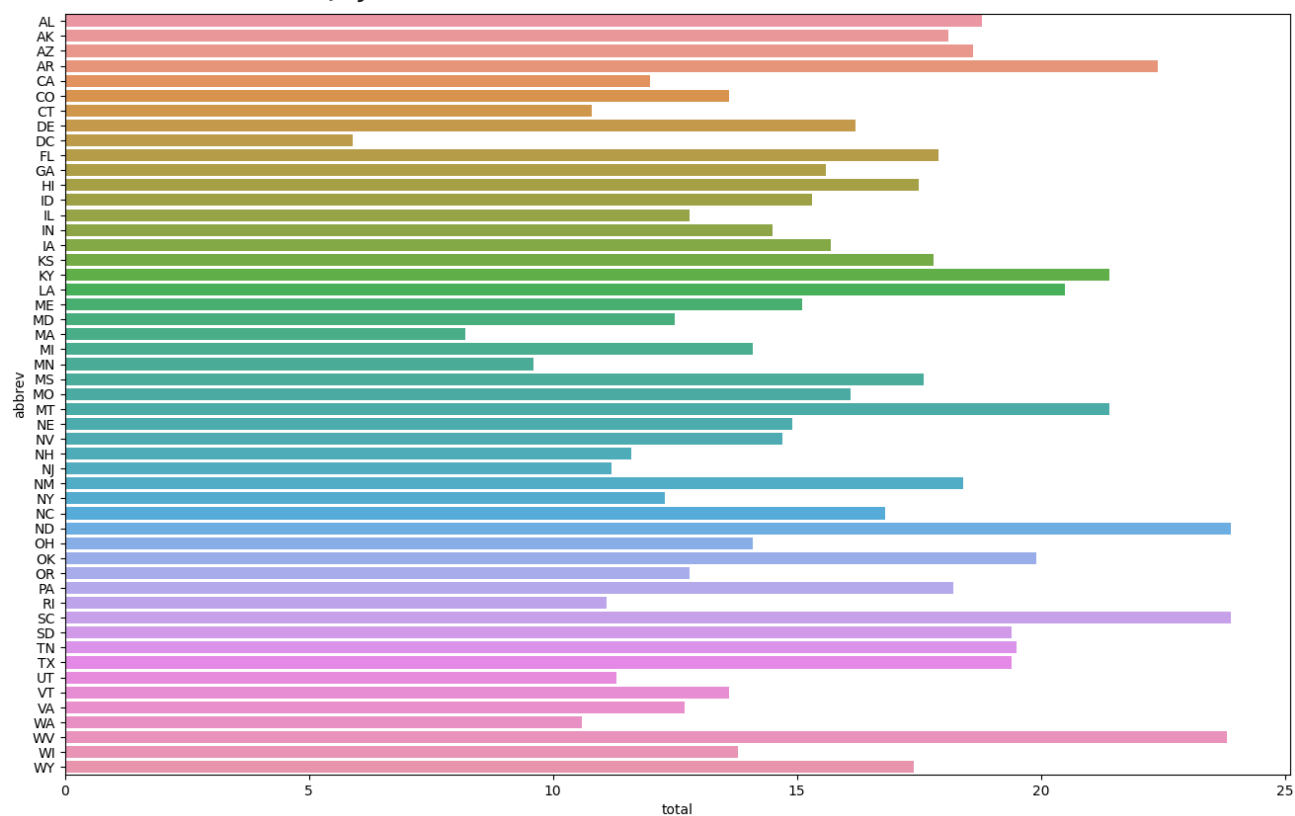
```
sb.lineplot(x = "ins_losses", y = "total", data = df)
```

<Axes: xlabel='ins_losses', ylabel='total'>



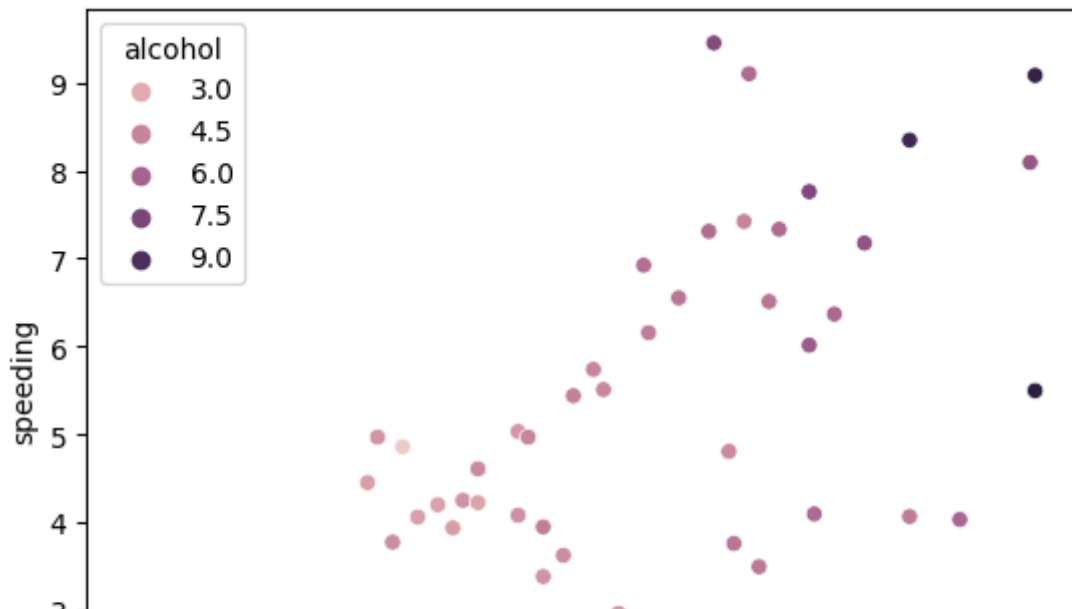
```
plt.subplots(figsize=(16, 10))
sb.barplot(data = df, x = 'total', y = 'abbrev')
```

<Axes: xlabel='total', ylabel='abbrev'>



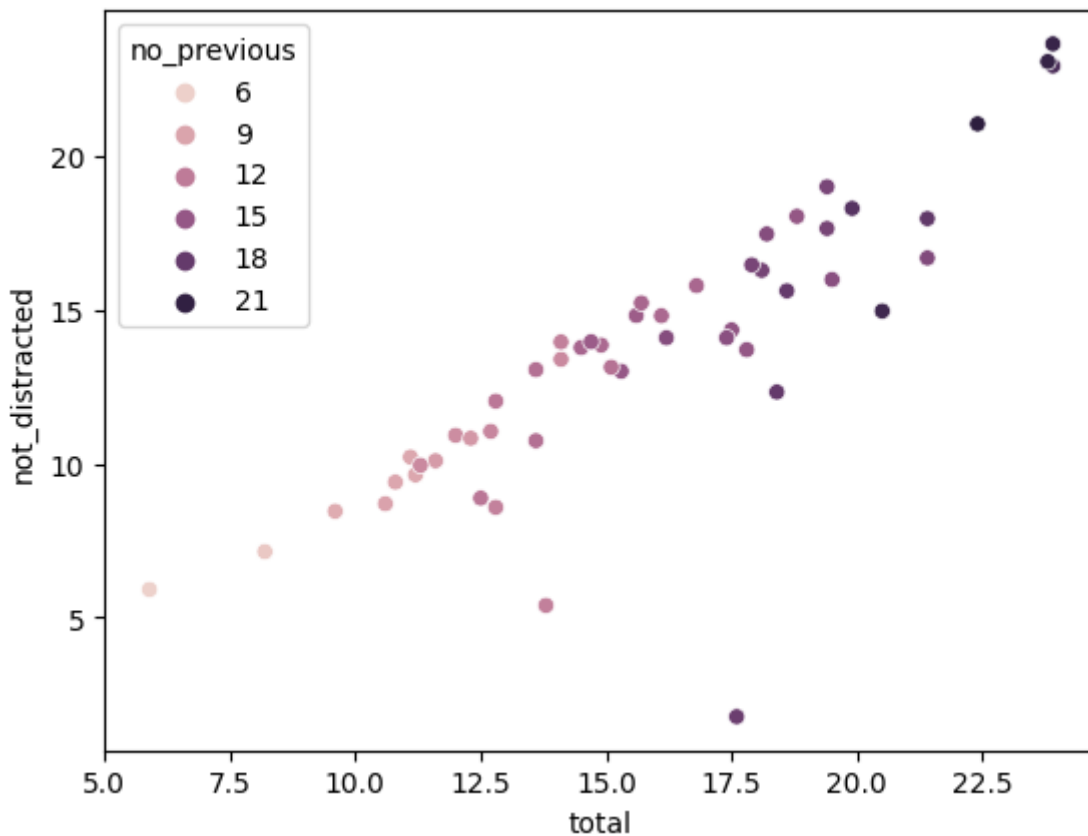
```
sb.scatterplot(x = "total", y = "speeding", data = df, hue = 'alcohol')
```

<Axes: xlabel='total', ylabel='speeding'>



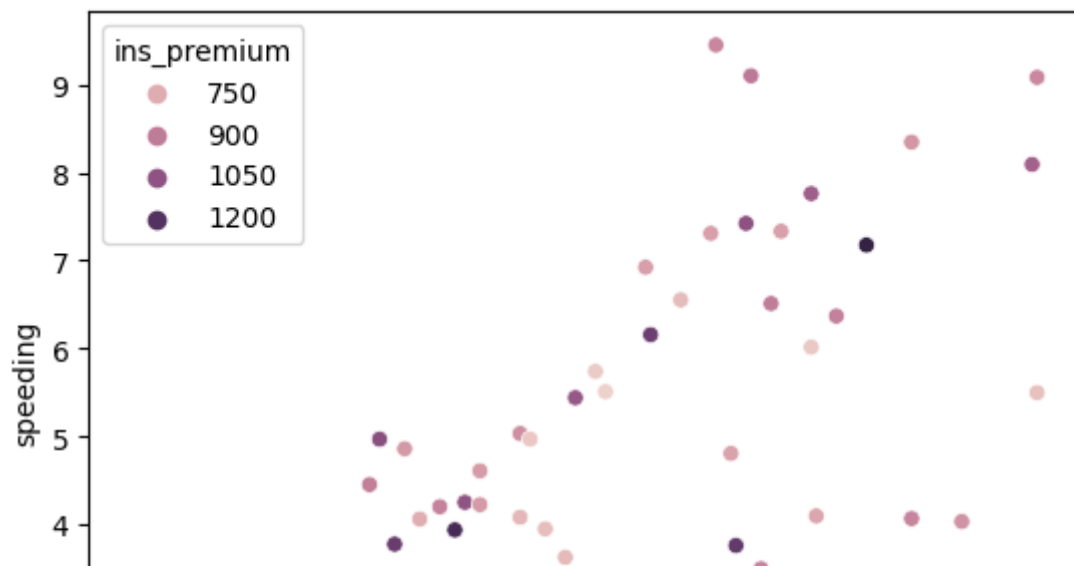
```
sb.scatterplot(x = "total", y = "not_distracted", data = df, hue = 'no_previous')
```

<Axes: xlabel='total', ylabel='not_distracted'>



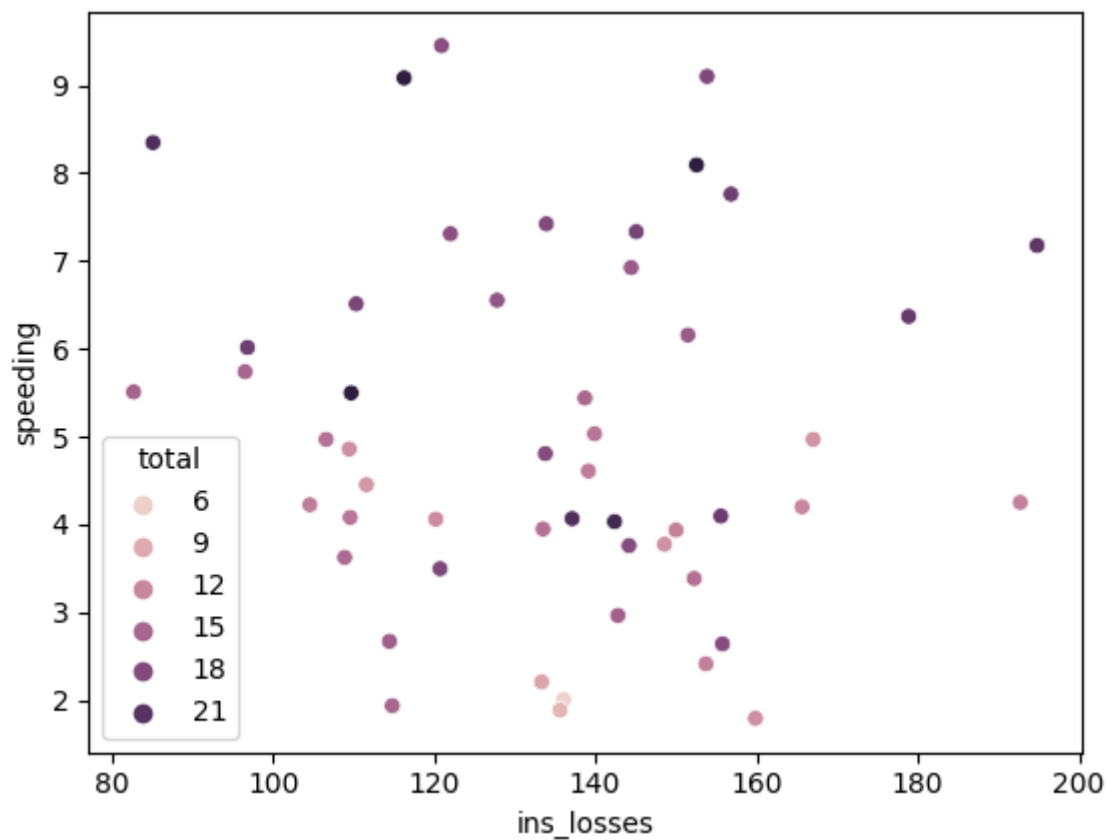
```
sb.scatterplot(x = "total", y = "speeding", data = df, hue = 'ins_premium')
```

<Axes: xlabel='total', ylabel='speeding'>



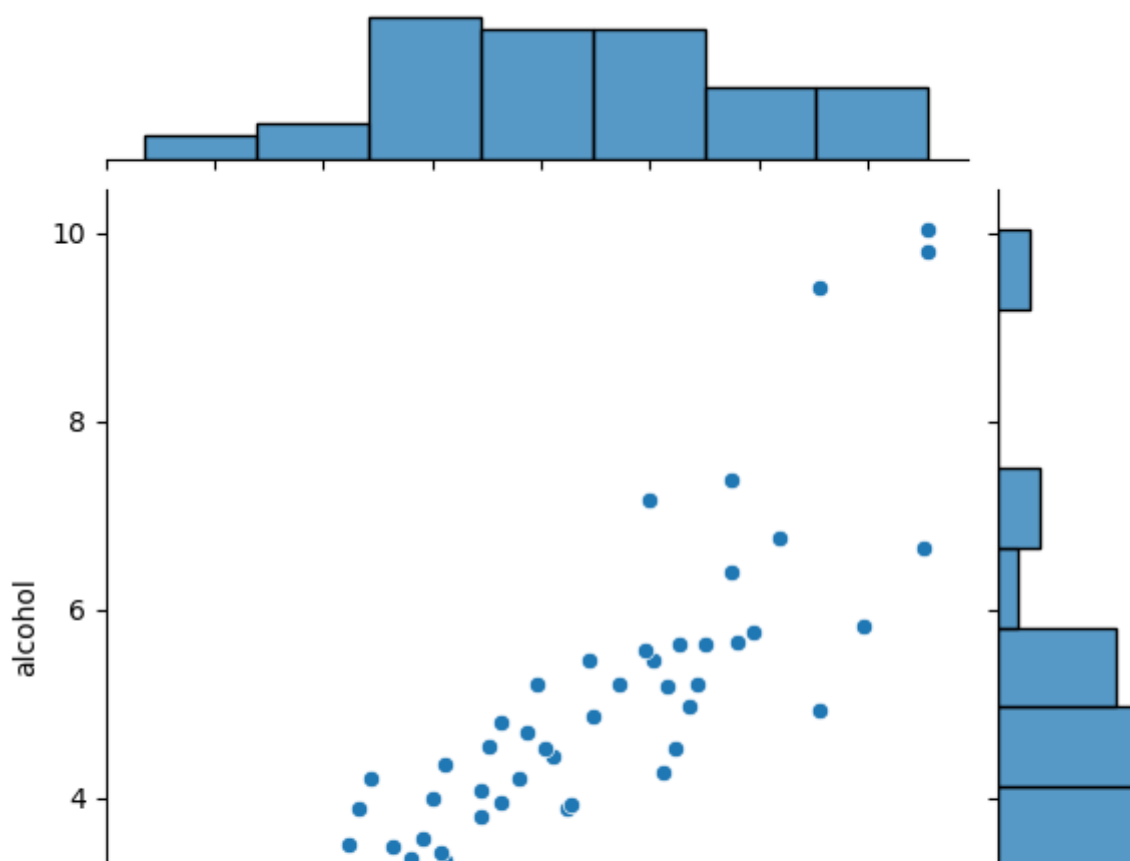
```
sb.scatterplot(x = "ins_losses", y = "speeding", data = df, hue = 'total')
```

<Axes: xlabel='ins_losses', ylabel='speeding'>



```
sb.jointplot(x = 'total', y = 'alcohol', data = df)
```

<seaborn.axisgrid.JointGrid at 0x7b8bb0e43550>



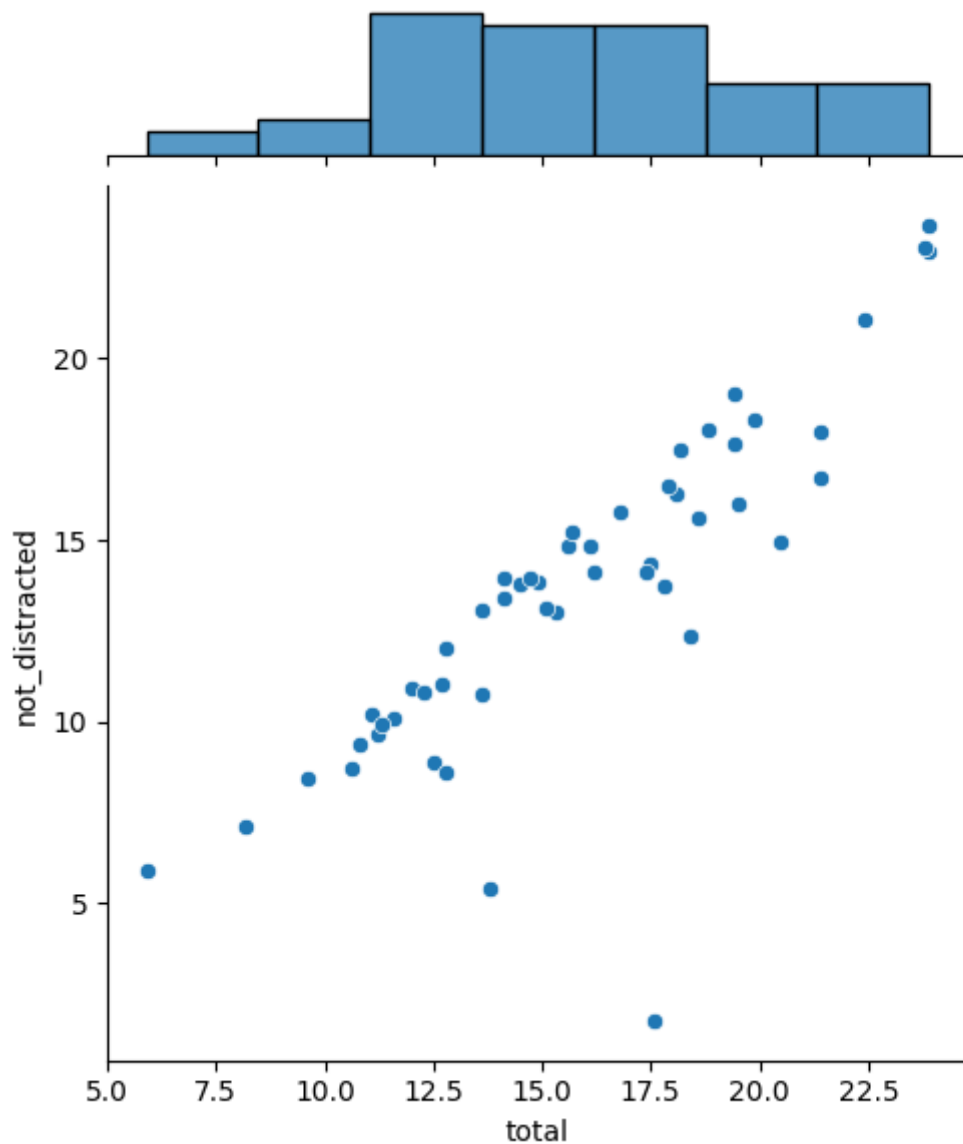
```
sb.jointplot(x = 'total', y = 'speeding', data = df)
```



```
<seaborn.axisgrid.JointGrid at 0x7b8bb0e436a0>
```

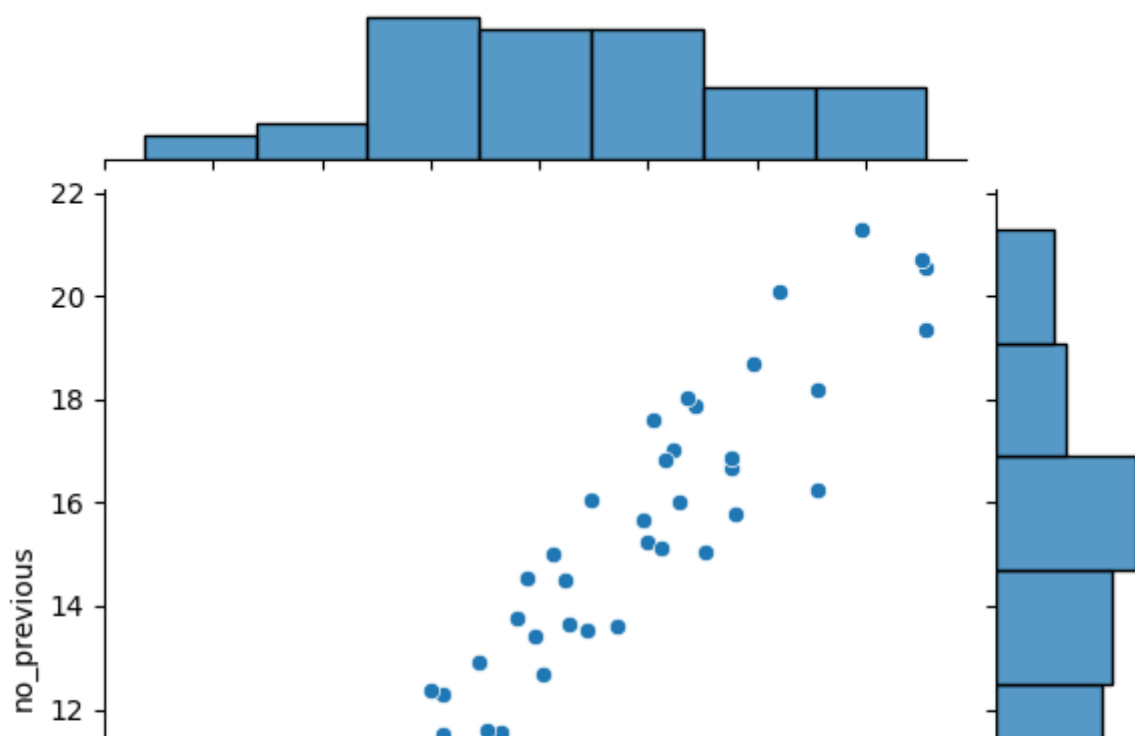
```
sb.jointplot(x = 'total', y = 'not_distracted', data = df)
```

```
<seaborn.axisgrid.JointGrid at 0x7b8bb0d79330>
```



```
sb.jointplot(x = 'total', y = 'no_previous', data = df)
```

<seaborn.axisgrid.JointGrid at 0x7b8bb0dcc700>

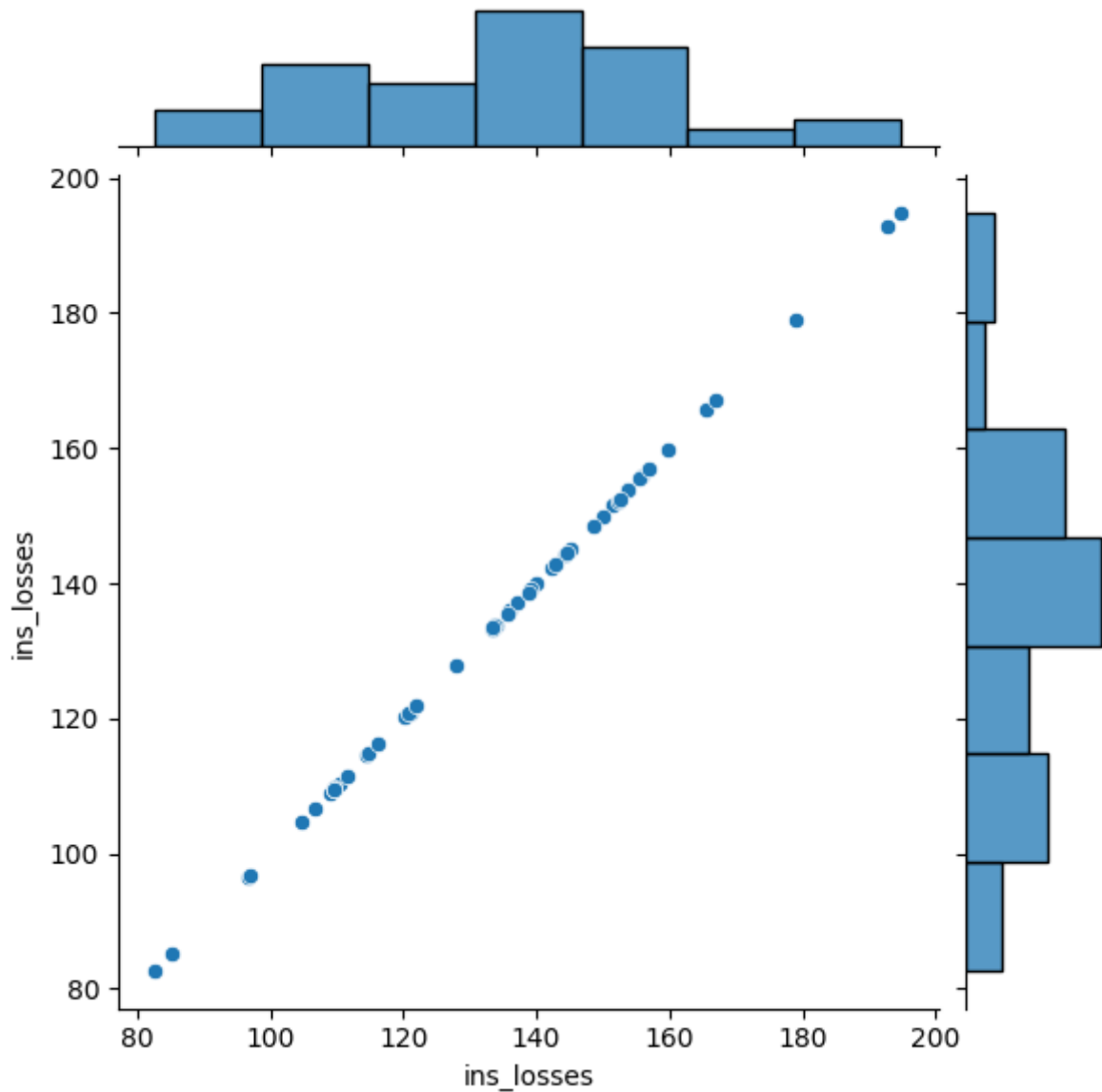


```
sb.jointplot(x = 'ins_losses', y = 'ins_premium', data = df)
```

```
<seaborn.axisgrid.JointGrid at 0x7b8bb0985090>
```

```
sb.jointplot(x = 'ins_losses', y = 'ins_losses', data = df)
```

```
<seaborn.axisgrid.JointGrid at 0x7b8bb0985de0>
```

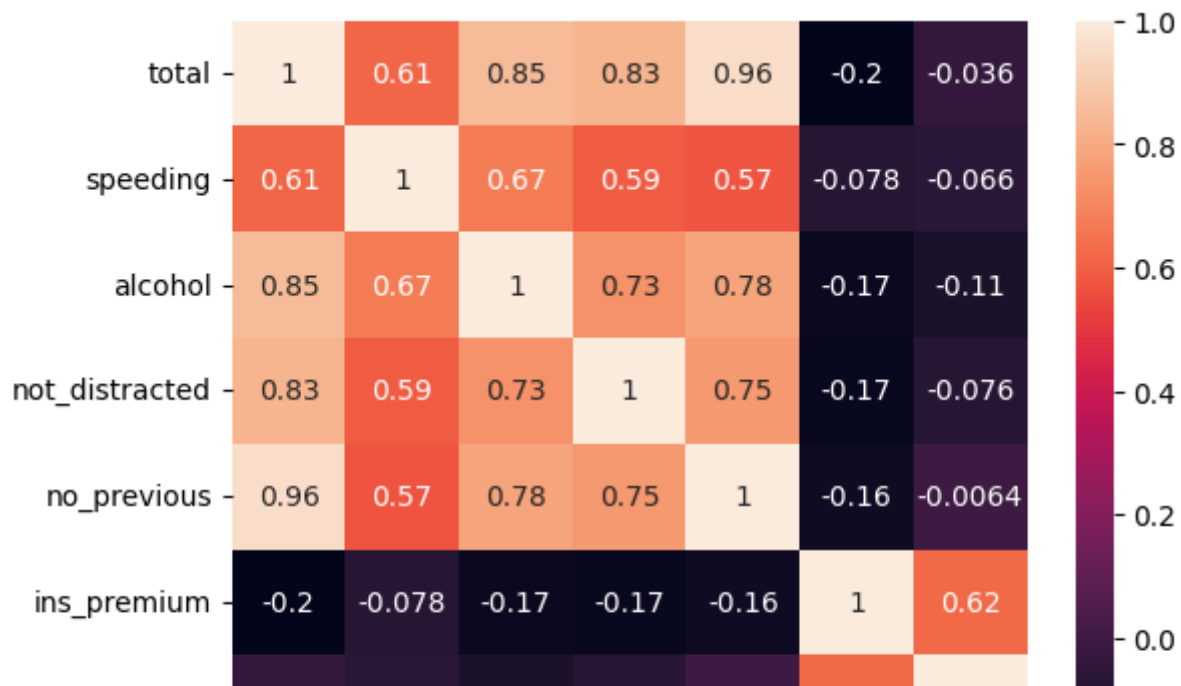


```
corr = df.corr()
```

```
<ipython-input-31-45893e33df67>:1: FutureWarning: The default value of numeric_only is deprecated
corr = df.corr()
```

```
sb.heatmap(corr, annot = True)
```

<Axes: >



```
sb.pairplot(df)
```

<seaborn.axisgrid.PairGrid at 0x7b8bafff7e50>

