



# SAMIR SHAH

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VIT VELLORE

In

In [7]:

```
1 import numpy as np
2 import pandas as pd
3 import matplotlib.pyplot as plt
4 import seaborn as sns
```

In [11]:

```
1 car = sns.load_dataset('car_crashes')
```

In [12]:

```
1 car.head()
```

Out[12]:

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

In

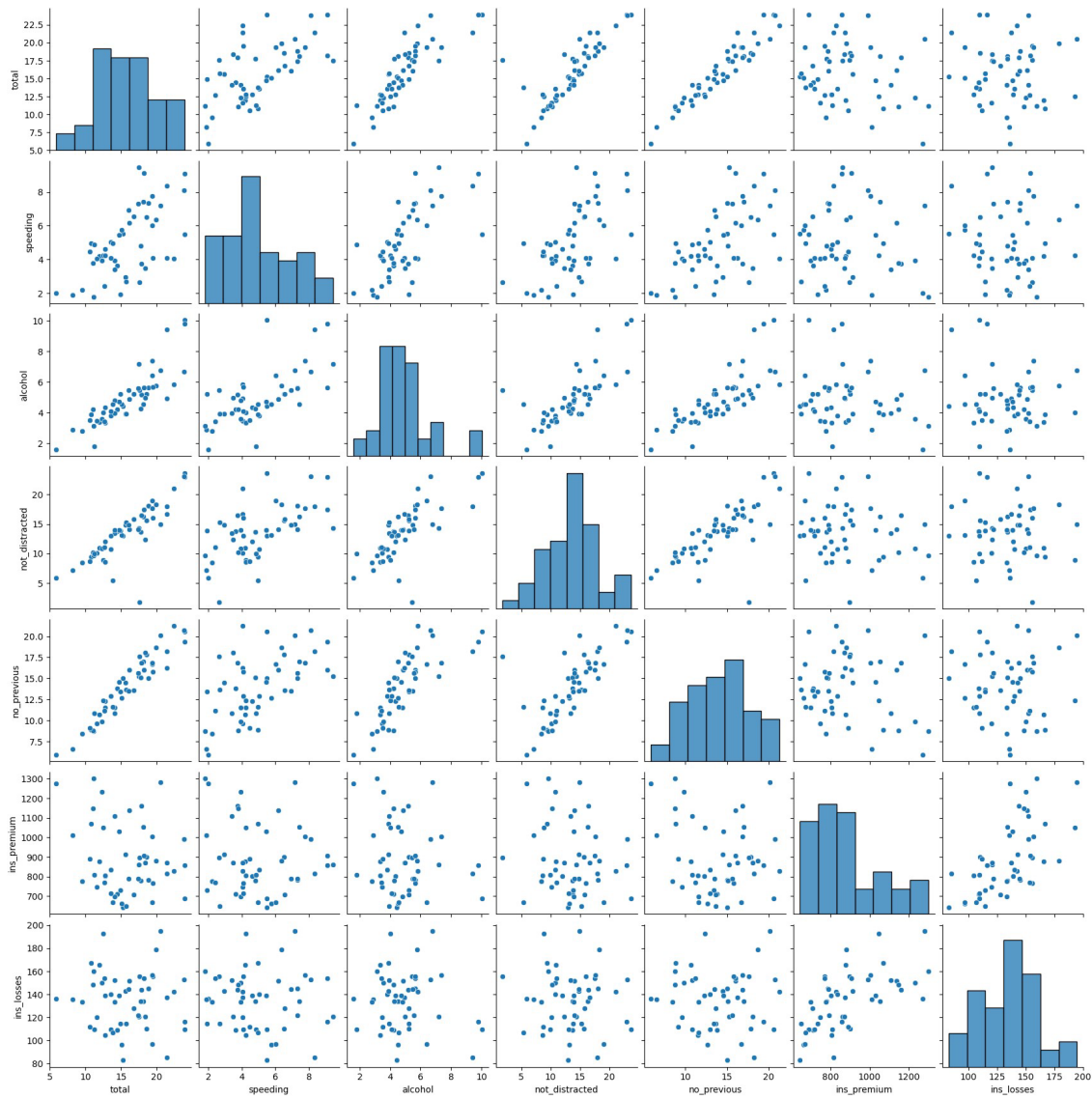
1

```
[13]: sns.pairplot(data=  
      car)
```

```
Out[13]: <seaborn.axisgrid.PairGrid at  
0x18c330d5600>
```

```
1 #sns.pairplot(car)
```

In



In [15]:

[23]:

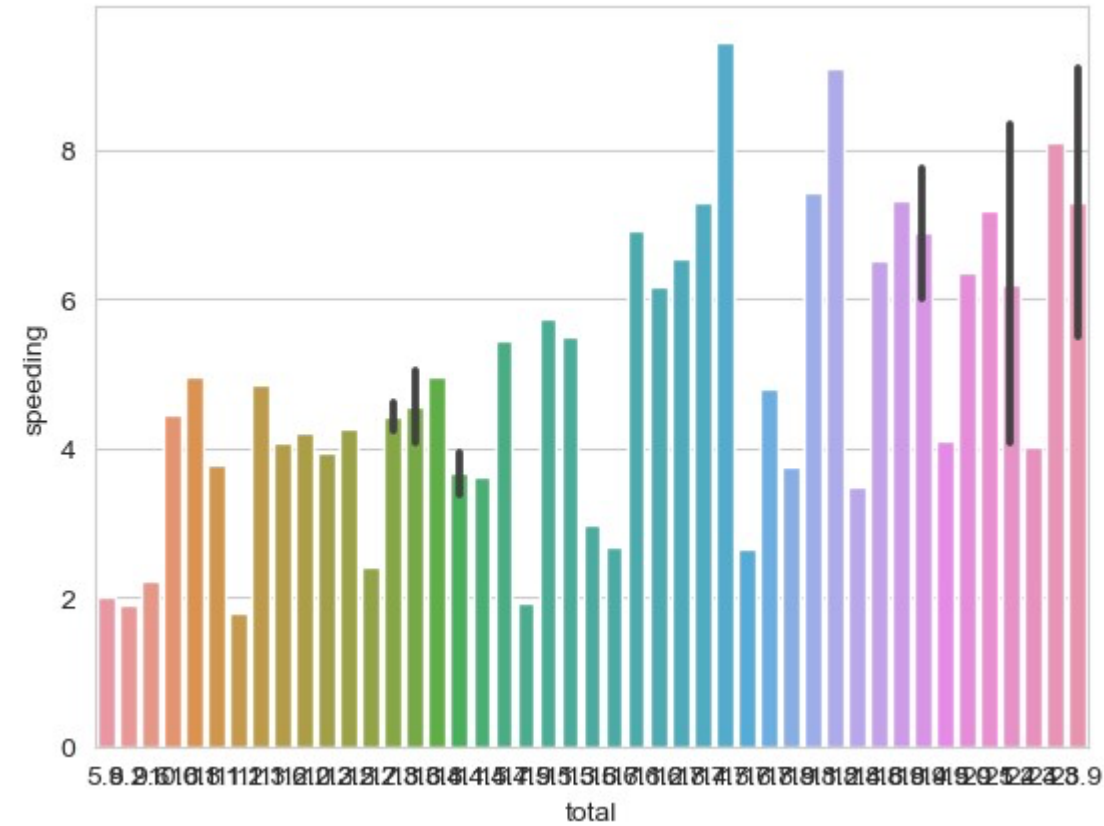
```
1 sns.set_style('whitegrid')
2 sns.barplot(x='total',y='speeding',data=car)
```

In

1

Out[23]:

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



In

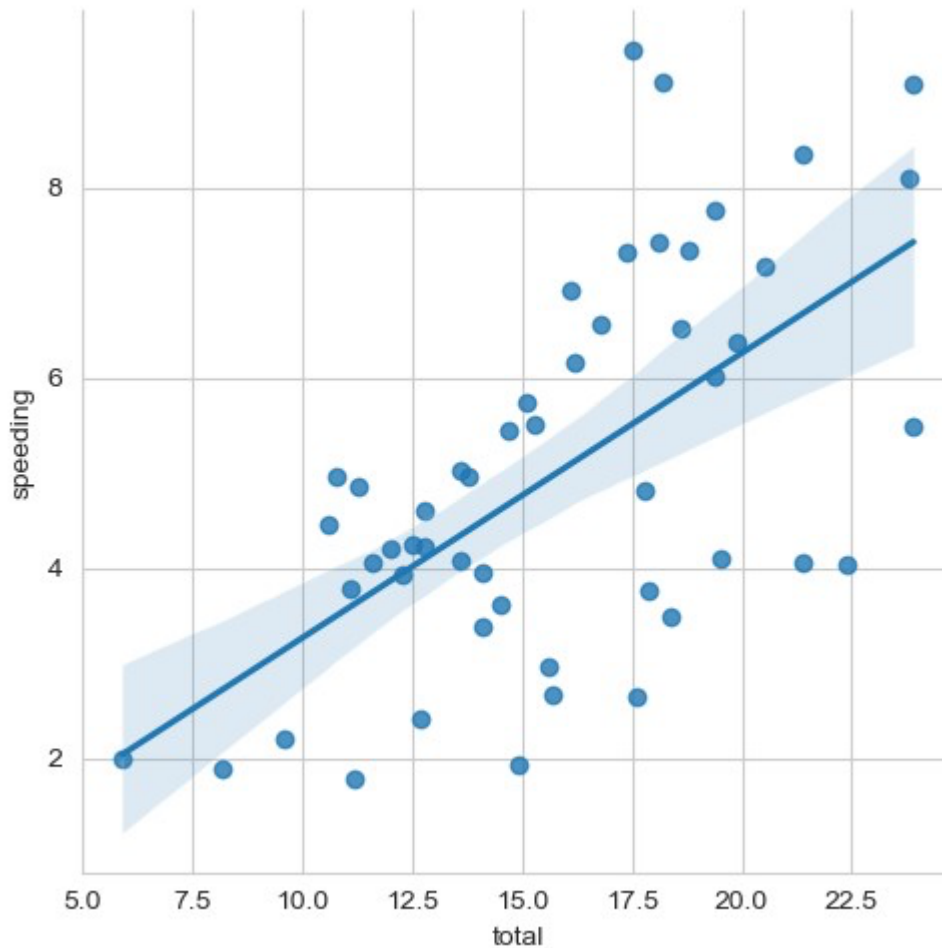
1

[24]:

```
sns.lmplot(x='total',y='speeding',data=car)
```

Out[24]:

```
<seaborn.axisgrid.FacetGrid at 0x18c3ff56440>
```



[25]:

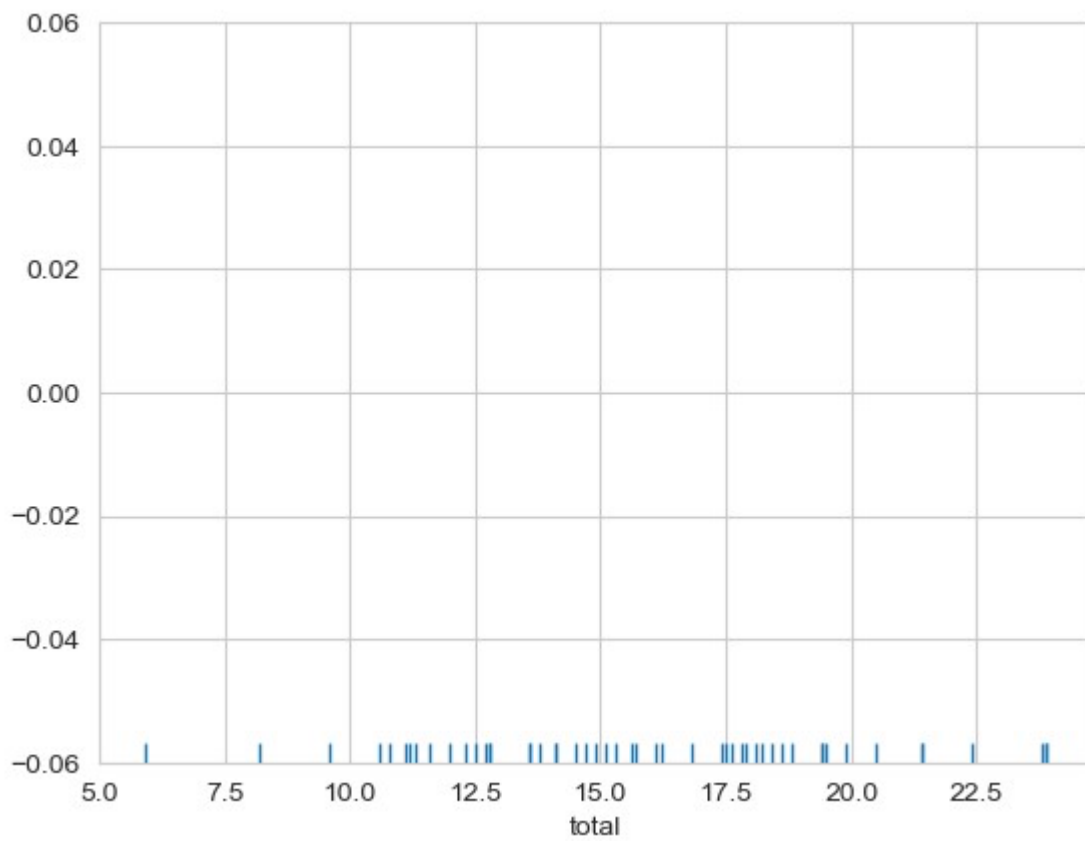
```
sns.rugplot(car['total'])
```

Out[25]:

```
<Axes: xlabel='total'>
```

In

1



[26]:

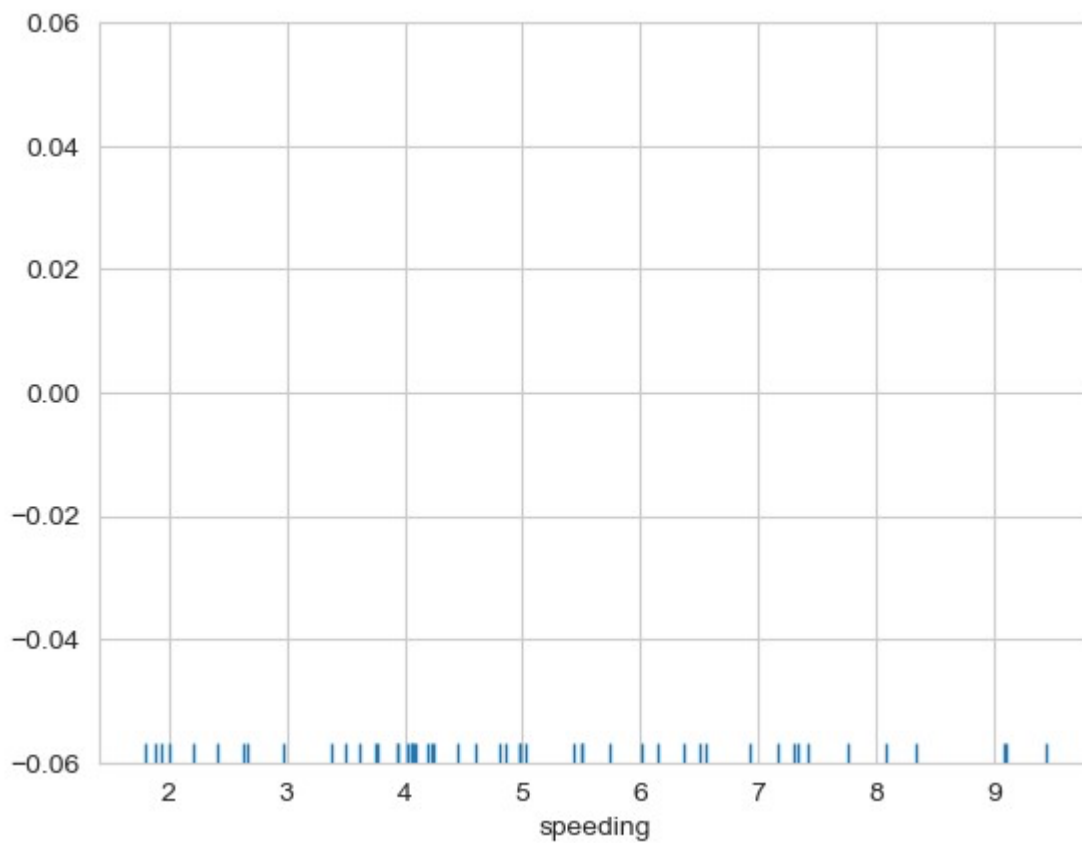
```
sns.rugplot(car['speeding'])
```

Out[26]:

```
<Axes: xlabel='speeding'>
```

In

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[27]:

```
sns.countplot(x='total',data=car)
```

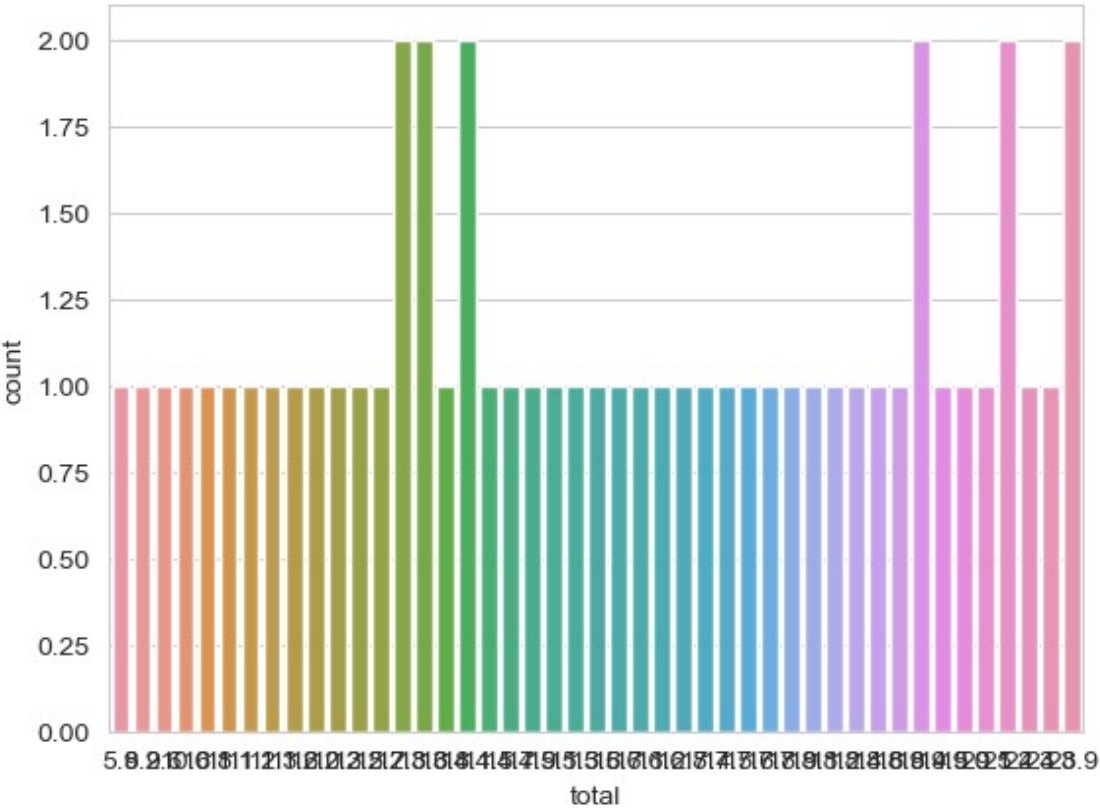
Out[27]:

```
<Axes: xlabel='total', ylabel='count'>
```



In

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In

1

```
[32]: sns.distplot(car['total'],kde=False,bins=20)
```

C:\Users\suraj\AppData\Local\Temp\ipykernel\_56736\2549342318.py:1: UserWarning:

`distplot` is a deprecated function and will be removed in seaborn v0.14.0.

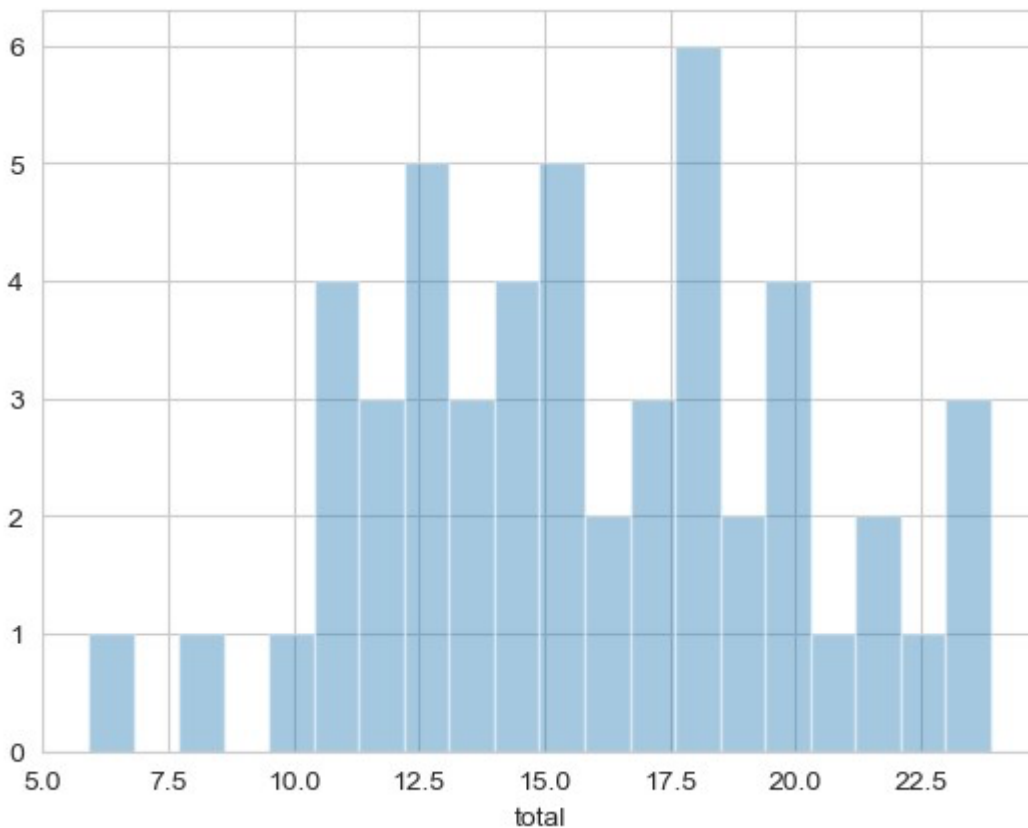
Please adapt your code to use either `displot` (a figure-level function with similar flexibility) or `histplot` (an axes-level function for histograms).

For a guide to updating your code to use the new functions, please see <https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751> (<https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751>)

```
sns.distplot(car['total'],kde=False,bins=20)
```

Out[32]:

<Axes: xlabel='total'>



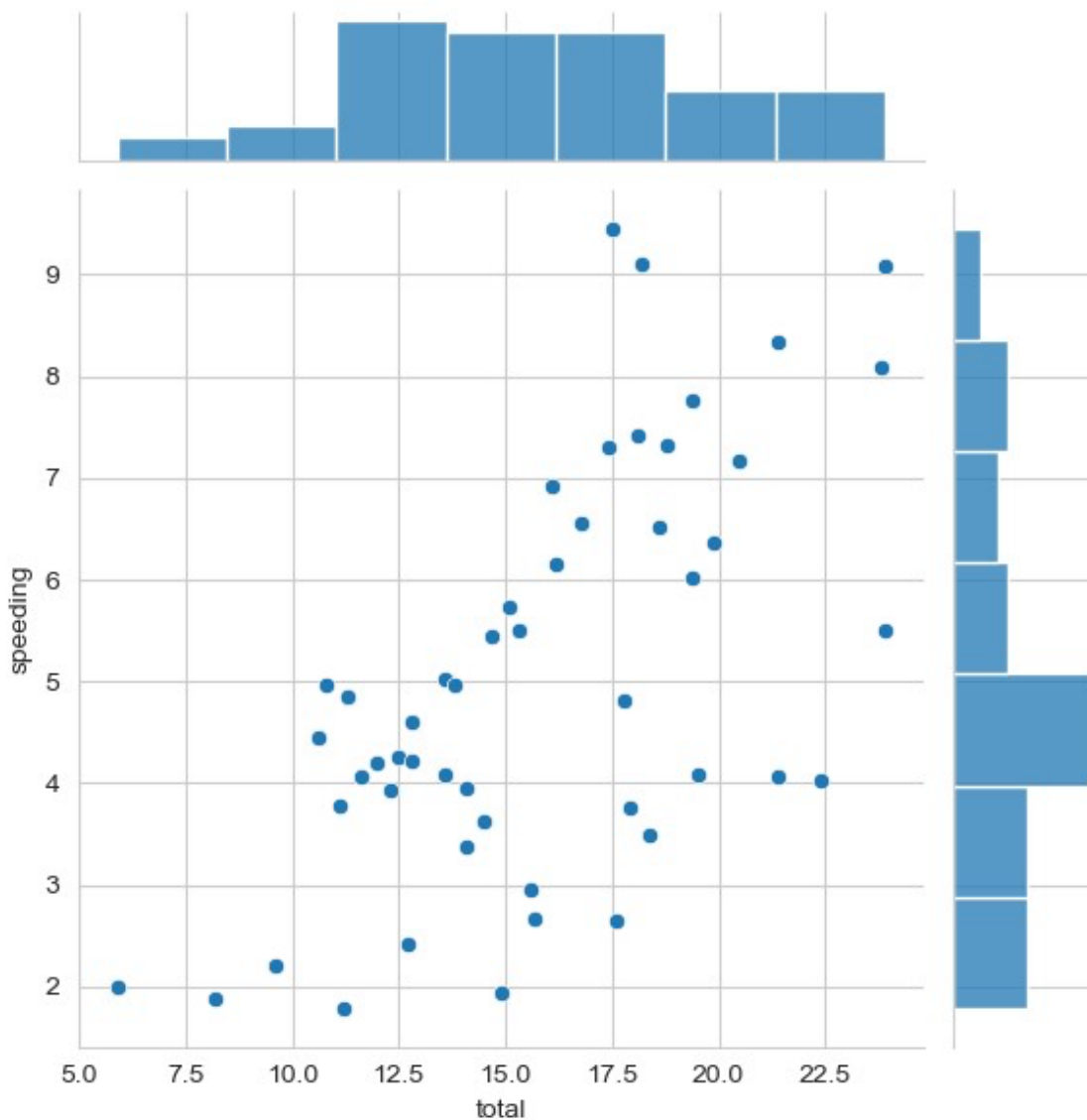
```
[40]: sns.jointplot(x='total',y='speeding',data=car)
```

In

1

Out[40]:

&lt;seaborn.axisgrid.JointGrid at 0x18c44814310&gt;



[47]:

```
sns.jointplot(x='ins_premium',y='ins_losses',data=car,cmap='coolwarm')
```

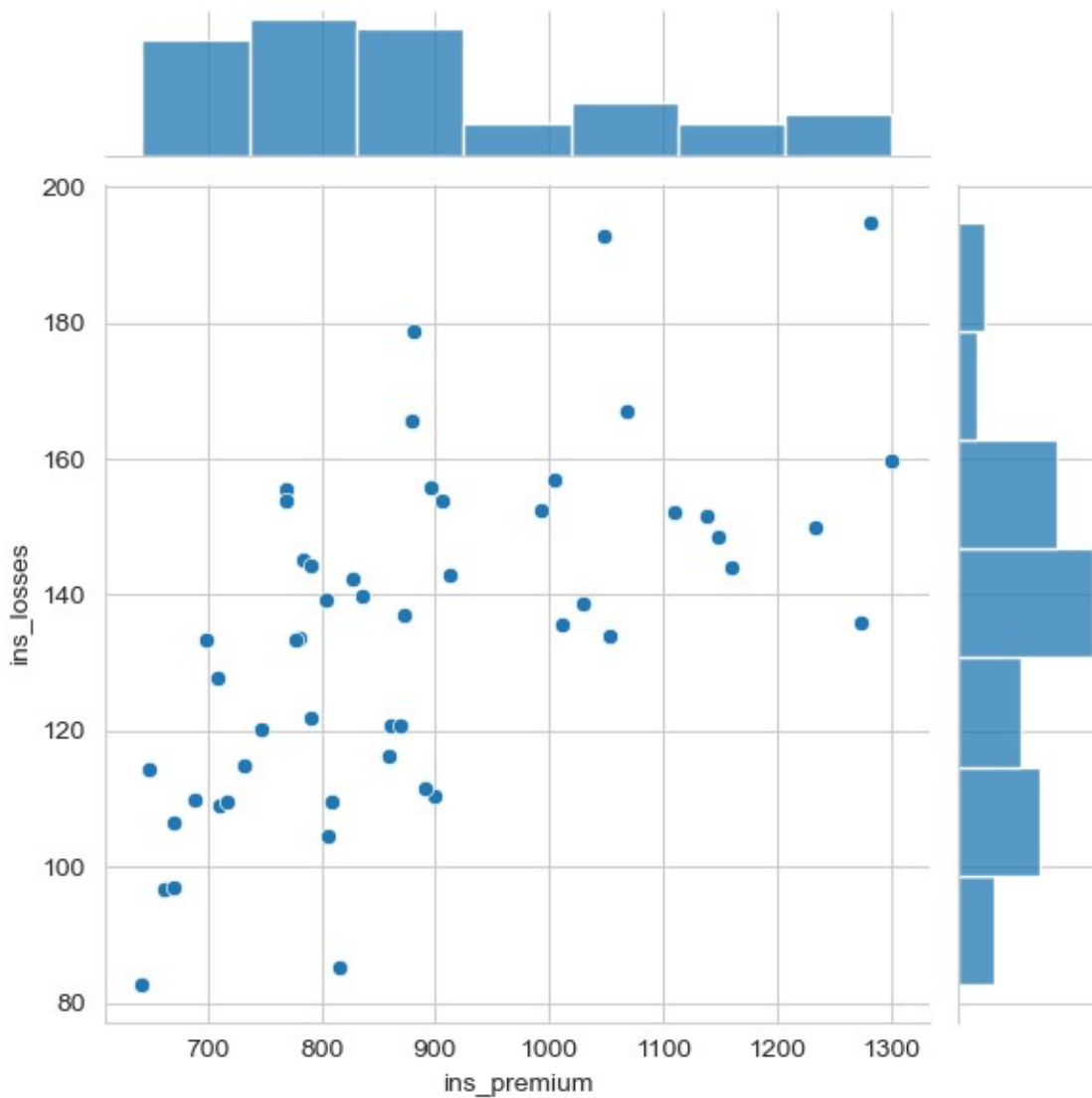
C:\Users\suraj\anaconda3\lib\site-packages\seaborn\relational.py:573: Use  
rWarning: No data for colormapping provided via 'c'. Parameters 'cmap' wi  
ll be ignored points = ax.scatter(x=x, y=y, \*\*kws)

Out[47]: &lt;seaborn.axisgrid.JointGrid at

0x18c46703970&gt;

In

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In [41]:

```
1 cart = car.corr()
```

C:\Users\suraj\AppData\Local\Temp\ipykernel\_56736\4240088711.py:1: Future Warning: The default value of numeric\_only in DataFrame.corr is deprecated. In a future version, it will default to False. Select only valid columns or specify the value of numeric\_only to silence this warning.

```
cart = car.corr()
```

[42]:

```
cart.head()
```

Out[42]:

```
total  speeding  alcohol  not_distracted  no_previous  ins_premium  ins_
```

In

1

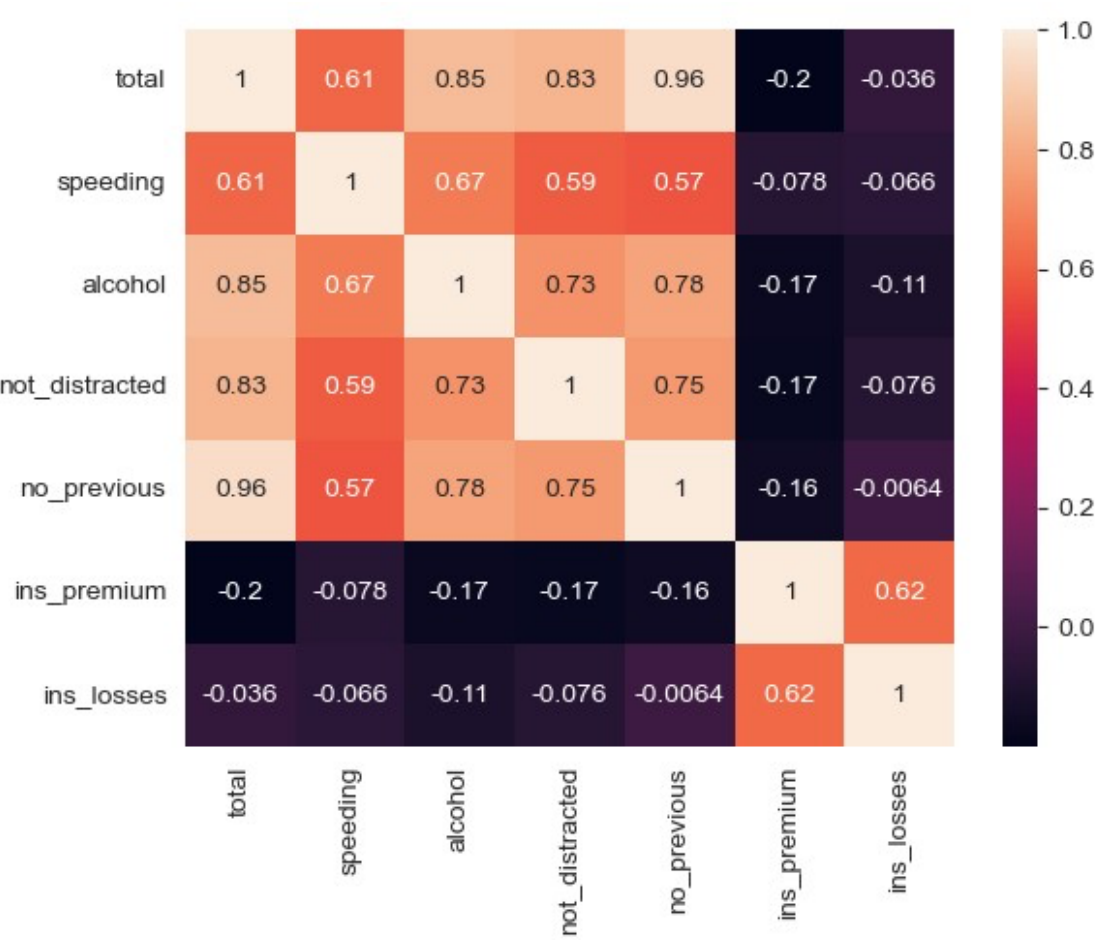
<b>total</b>	1.000000	0.611548	0.852613	0.827560	0.956179	-0.199702	-0
<b>speeding</b>	0.611548	1.000000	0.669719	0.588010	0.571976	-0.077675	-0
<b>alcohol</b>	0.852613	0.669719	1.000000	0.732816	0.783520	-0.170612	-0
<b>not_distracted</b>	0.827560	0.588010	0.732816	1.000000	0.747307	-0.174856	-0
<b>no_previous</b>	0.956179	0.571976	0.783520	0.747307	1.000000	-0.156895	-0

In [73]:

1 sns.heatmap(cart,annot=True)

Out[73]:

<Axes: >



[ ]:

In

1

In [ ]:

1

In [ ]:

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In [ ]:

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