```
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REG num: 21bce7030
campus:vitap

import seaborn as sns
print(sns.get_dataset_names())

['anagrams', 'anscombe', 'attention', 'brain_networks', 'car_crashes', 'diamonds', 'dots', 'dowjones', 'exercise', 'flights', 'fmri', '

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

	total	speeding	alcohol	not_distracted	no_previous	ins_premium	ins_losses	abbı
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	

x = df.head(5)

Х

	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

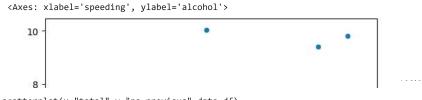
df.info()

<class 'pandas.core.frame.DataFrame'>
RangeIndex: 51 entries, 0 to 50
Data columns (total 8 columns):

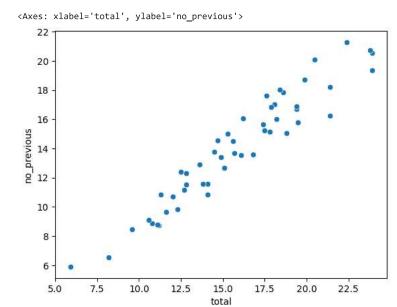
Data	corumns (cocar	o COTUMINS).							
#	Column	Non-Null Count	Dtype						
0	total	51 non-null	float64						
1	speeding	51 non-null	float64						
2	alcohol	51 non-null	float64						
3	<pre>not_distracted</pre>	51 non-null	float64						
4	no_previous	51 non-null	float64						
5	ins_premium	51 non-null	float64						
6	ins_losses	51 non-null	float64						
7	abbrev	51 non-null	object						
dtype	<pre>dtypes: float64(7), object(1)</pre>								
memor	memory usage: 3.3+ KB								

memory usage. 5.51 kb

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

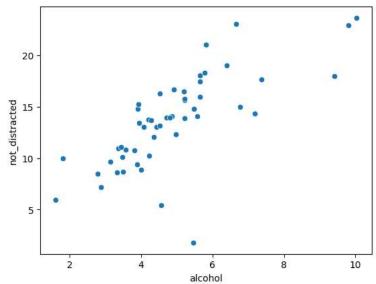


 $\verb|sns.scatterplot(x="total",y="no_previous",data=df)|\\$



sns.scatterplot(x="alcohol",y="not_distracted",data=df)



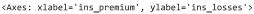


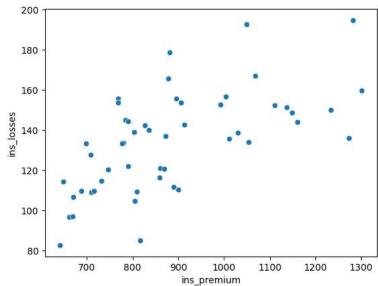
sns.scatterplot(x="total",y="alcohol",data=df)

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



sns.scatterplot(x='ins_premium',y='ins_losses',data=df)





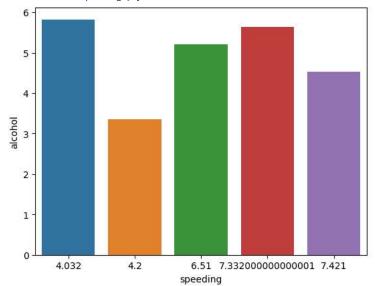
sns.barplot(data=x,x="speeding",y="alcohol",ci=None)

<ipython-input-10-590eb3735379>:1: FutureWarning:

The `ci` parameter is deprecated. Use `errorbar=None` for the same effect.

sns.barplot(data=x,x="speeding",y="alcohol",ci=None)



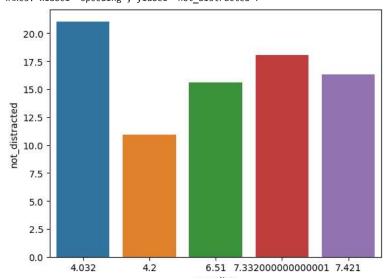


sns.barplot(data=x,x="speeding",y="not_distracted",ci=None)

<ipython-input-11-7a37e51ace5c>:1: FutureWarning:

The `ci` parameter is deprecated. Use `errorbar=None` for the same effect.

sns.barplot(data=x,x="speeding",y="not_distracted",ci=None)
<Axes: xlabel='speeding', ylabel='not_distracted'>

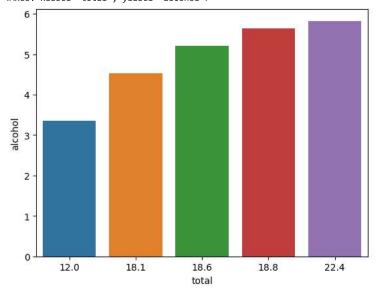


sns.barplot(data=x,x="total",y="alcohol",ci=None)

<ipython-input-12-fb68b361ba2e>:1: FutureWarning:

The `ci` parameter is deprecated. Use `errorbar=None` for the same effect.

sns.barplot(data=x,x="total",y="alcohol",ci=None)
<Axes: xlabel='total', ylabel='alcohol'>

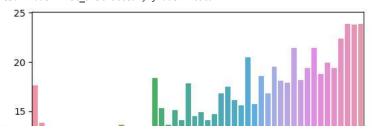


sns.barplot(data=df,x="not_distracted",y="total",ci=None)

<ipython-input-13-e8e59c8a046e>:1: FutureWarning:

The $\mbox{`ci`}$ parameter is deprecated. Use $\mbox{`errorbar=None'}$ for the same effect.

 $\label{lem:sns.barplot} sns.barplot(data=df,x="not_distracted",y="total",ci=None) $$ <Axes: xlabel='not_distracted', ylabel='total'> $$$

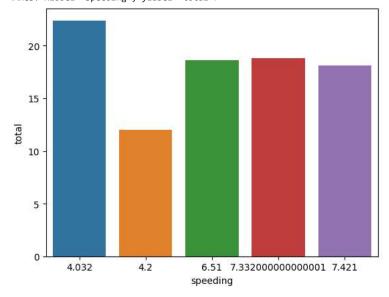


sns.barplot(data=x,x="speeding",y="total",ci=None)

<ipython-input-14-fac4d6802682>:1: FutureWarning:

The `ci` parameter is deprecated. Use `errorbar=None` for the same effect.

sns.barplot(data=x,x="speeding",y="total",ci=None)
<Axes: xlabel='speeding', ylabel='total'>



sns.lineplot(x='alcohol',y='total',data=df,ci=None)

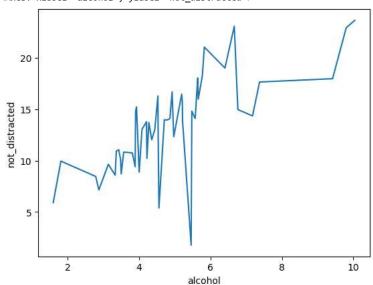
<ipython-input-15-8048940bd33b>:1: FutureWarning:

sns.lineplot(x='alcohol',y='not_distracted',data=df,ci=None)

<ipython-input-16-1db2e6e93e9c>:1: FutureWarning:

The `ci` parameter is deprecated. Use `errorbar=None` for the same effect.

sns.lineplot(x='alcohol',y='not_distracted',data=df,ci=None)
<Axes: xlabel='alcohol', ylabel='not_distracted'>

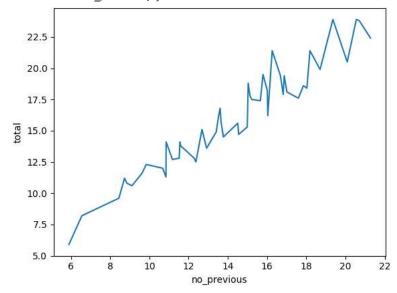


sns.lineplot(x='no_previous',y='total',data=df,ci=None)

<ipython-input-17-d123944bfd1e>:1: FutureWarning:

The `ci` parameter is deprecated. Use `errorbar=None` for the same effect.

sns.lineplot(x='no_previous',y='total',data=df,ci=None)
<Axes: xlabel='no_previous', ylabel='total'>

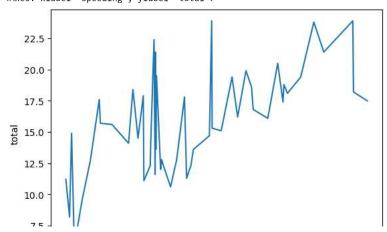


sns.lineplot(x='speeding',y='total',data=df,ci=None)

<ipython-input-18-25c3c4d233ba>:1: FutureWarning:

The $\mbox{`ci`}$ parameter is deprecated. Use $\mbox{`errorbar=None`}$ for the same effect.

sns.lineplot(x='speeding',y='total',data=df,ci=None)
<Axes: xlabel='speeding', ylabel='total'>

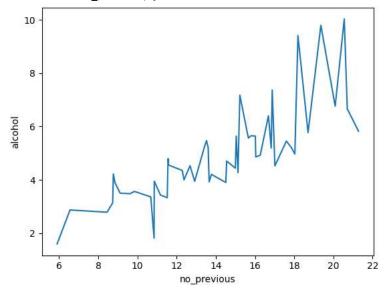


sns.lineplot(x='no_previous',y='alcohol',data=df,ci=None)

<ipython-input-19-b88e38b2b7ca>:1: FutureWarning:

The `ci` parameter is deprecated. Use `errorbar=None` for the same effect.

sns.lineplot(x='no_previous',y='alcohol',data=df,ci=None)
<Axes: xlabel='no_previous', ylabel='alcohol'>



sns.distplot(df["total"])

<ipython-input-20-0d5ead9bfd1a>: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

```
sns.distplot(df["total"])
<Axes: xlabel='total', ylabel='Density'>

0.08 -
0.07 -
```

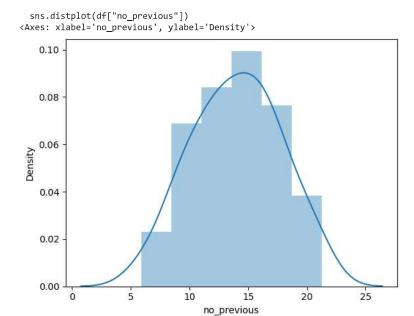
<ipython-input-21-f4c3808e7f5a>:1: UserWarning:

sns.distplot(df["no_previous"])

`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 $\underline{\text{https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751}}$



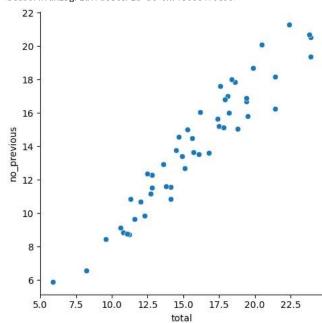
sns.relplot(x='alcohol',y='total',data=df,hue="speeding")





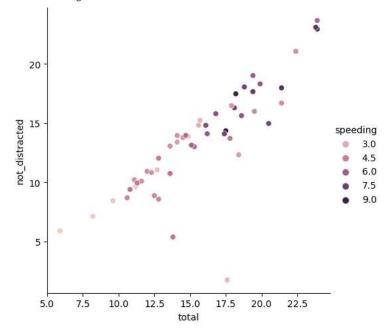
sns.relplot(x='total',y='no_previous',data=df)





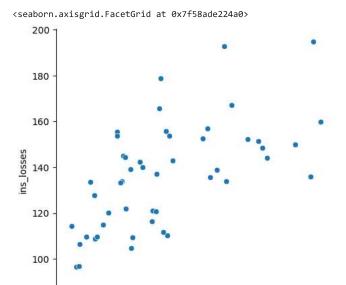
sns.relplot(x='total',y='not_distracted',data=df,hue="speeding")





sns.relplot(x='ins_premium',y='ins_losses',data=df)

1300



900

1000

1100

1200

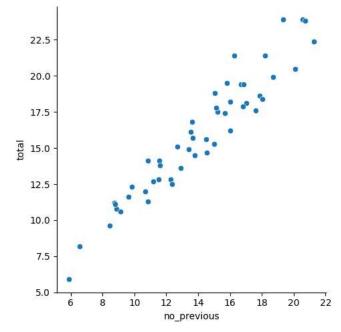
sns.relplot(x='no_previous',y='total',data=df)

700

80



800



sns.relplot(x='speeding',y='total',data=df)

```
<seaborn.axisgrid.FacetGrid at 0x7f58ade228f0>
        22.5
        20.0
        17.5
df["speeding"].value_counts()
    4.968
    7.332
             1
    9.100
             1
    5.439
             1
    4.060
             1
    1.792
             1
    3.496
             1
    3.936
             1
    6.552
             1
    5.497
             1
    3.948
             1
    6.368
    4.224
             1
             1
    3.774
    8.346
             1
    9.082
             1
    6.014
             1
    4.095
             1
    7.760
             1
    4.859
             1
    4.080
             1
             1
    2.413
    4.452
             1
    8.092
             1
    1.937
             1
    6.923
             1
    7.421
             1
    2.640
             1
    6.510
    4.032
             1
    4.200
             1
    5.032
             1
    6.156
    2.006
             1
    3.759
             1
             1
    2.964
    9.450
             1
    5.508
             1
    4.608
             1
    3.625
             1
    2.669
             1
    4.806
             1
    4.066
```

sns.barplot(data=df,x='not_distracted',y='total')

7.175

5.738

4.250

1.886

3.384

2.208

7.308

1

1

1

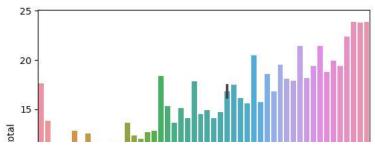
1

1

1

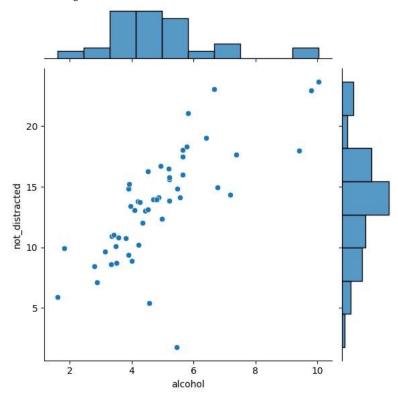
Name: speeding, dtype: int64

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



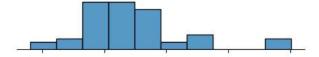
sns.jointplot(x="alcohol",y="not_distracted",data=df)

<seaborn.axisgrid.JointGrid at 0x7f58ade7fdf0>



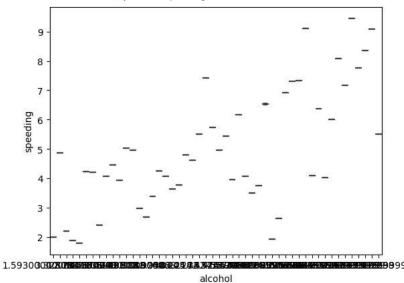
sns.jointplot(x="alcohol",y="total",data=df)

<seaborn.axisgrid.JointGrid at 0x7f58b00c11e0>



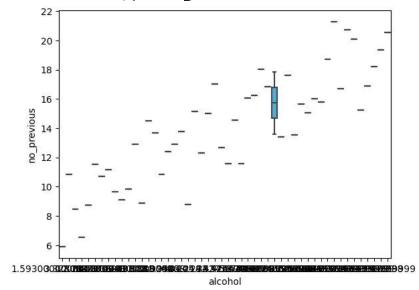
 $\verb|sns.boxplot(x="alcohol",y="speeding",data=df)|\\$

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



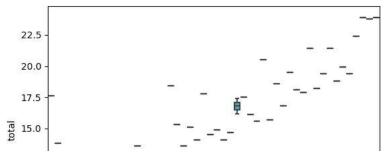
sns.boxplot(x="alcohol",y="no_previous",data=df)

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



sns.boxplot(x="not_distracted",y="total",data=df)

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



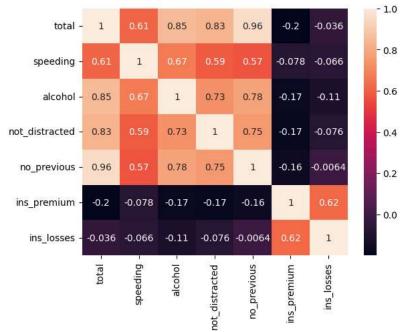
corr = df.corr()
corr

<ipython-input-36-4381f08f6434>:1: FutureWarning: The default value of numeric_only in DataF
corr = df.corr()

	total	speeding	alcohol	not_distracted	no_previous	ins_premium	ins_lo
total	1.000000	0.611548	0.852613	0.827560	0.956179	-0.199702	-0.0
speeding	0.611548	1.000000	0.669719	0.588010	0.571976	-0.077675	-0.06
alcohol	0.852613	0.669719	1.000000	0.732816	0.783520	-0.170612	-0.1
not_distracted	0.827560	0.588010	0.732816	1.000000	0.747307	-0.174856	-0.0
no_previous	0.956179	0.571976	0.783520	0.747307	1.000000	-0.156895	-0.00
ins_premium	-0.199702	-0.077675	-0.170612	-0.174856	-0.156895	1.000000	0.6
ins_losses	-0.036011	-0.065928	-0.112547	-0.075970	-0.006359	0.623116	1.00

sns.heatmap(corr,annot=True)

<Axes: >



✓ 0s completed at 11:00 PM