```
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# VIT-AP UNIVERSITY
                                                    # ASSIGNMENT-2
```

```
import seaborn as sns
```

```
df=sns.get_dataset_names()
df
```

```
['anagrams',
 'anscombe',
 'attention',
 'brain_networks',
 'car_crashes',
 'diamonds',
 'dots',
 'dowjones',
 'exercise',
 'flights',
 'fmri',
 'geyser',
 'glue',
 'healthexp',
 'iris',
 'mpg',
 'penguins',
 'planets',
 'seaice',
 'taxis',
 'tips',
 'titanic']
```

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

```
df.info()
```

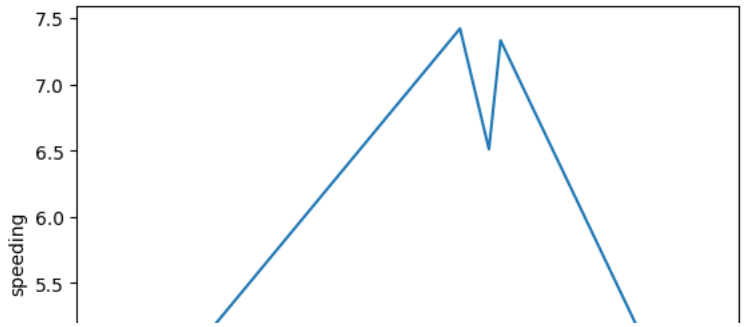
```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 51 entries, 0 to 50
Data columns (total 8 columns):
 #   Column          Non-Null Count  Dtype  
---  ------          --------------  -----  
 0   total           51 non-null     float64
 1   speeding        51 non-null     float64
 2   alcohol         51 non-null     float64
 3   not_distracted  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 
dtypes: float64(7), object(1)
memory usage: 3.3+ KB
```

```
smalldata=df.head()
smalldata
```

	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

```
sns.lineplot(x="total",y="speeding",data=smalldata)
```

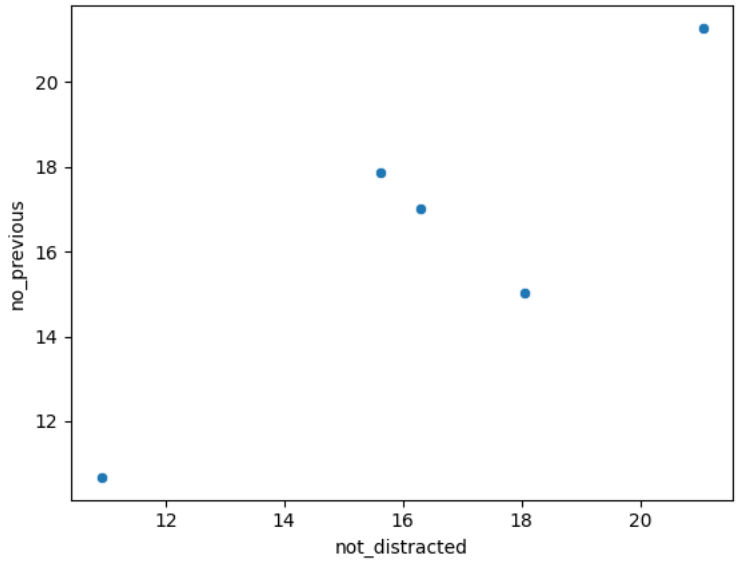
```
<Axes: xlabel='total', ylabel='speeding'>
```



inference: The line plot of "total" vs. "speeding" likely shows the relationship between some overall metric ("total") and the rate of speeding incidents ("speeding") for different states or regions, suggesting a potential correlation or trend.

```
sns.scatterplot(x="not_distracted",y="no_previous",data=smalldata)
```

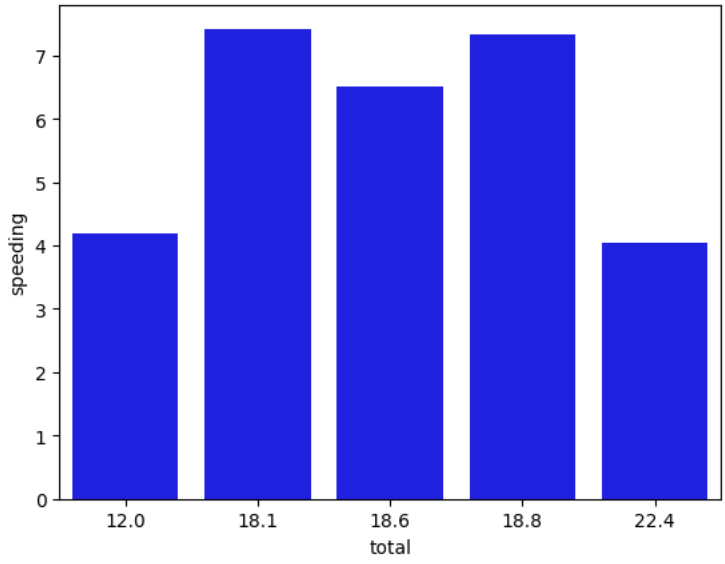
```
<Axes: xlabel='not_distracted', ylabel='no_previous'>
```



inference: he scatter plot of "not_distracted" vs. "no_previous" likely explores the relationship between non-distracted driving and the absence of previous offenses, possibly indicating whether drivers with no previous offenses te

```
sns.barplot(x="total",y="speeding",data=smalldata,color="blue")
```

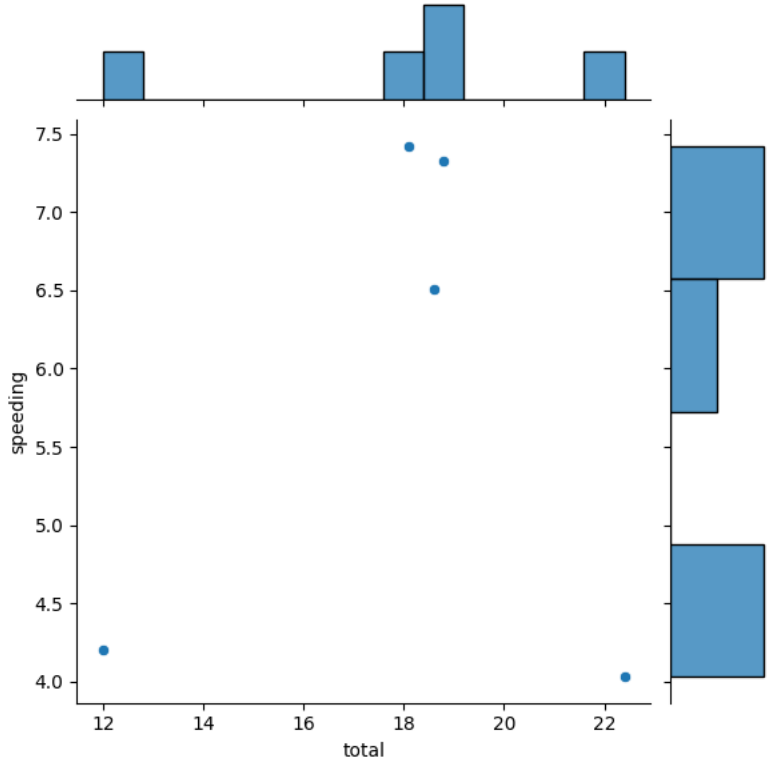
```
<Axes: xlabel='total', ylabel='speeding'>
```



inference:
The bar plot of "total" vs. "speeding" likely displays the average or total speeding incidents for different categories represented by "total," suggesting variations in speeding rates across these

```
sns.jointplot(x="total",y="speeding",data=smalldata)
```

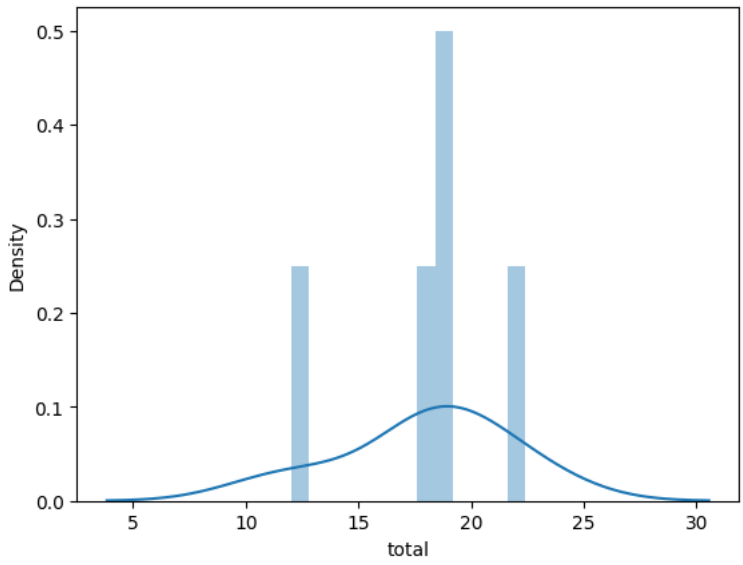
```
<seaborn.axisgrid.JointGrid at 0x7d6b541c5f00>
```




```
inference:
            The joint plot of "total" vs. "speeding" likely provides a visual representation of the relationship between these two varia
            if there's any correlation or clustering between the total metric and the rate of speeding incidents.
```

```
sns.distplot(smalldata["total"])
```

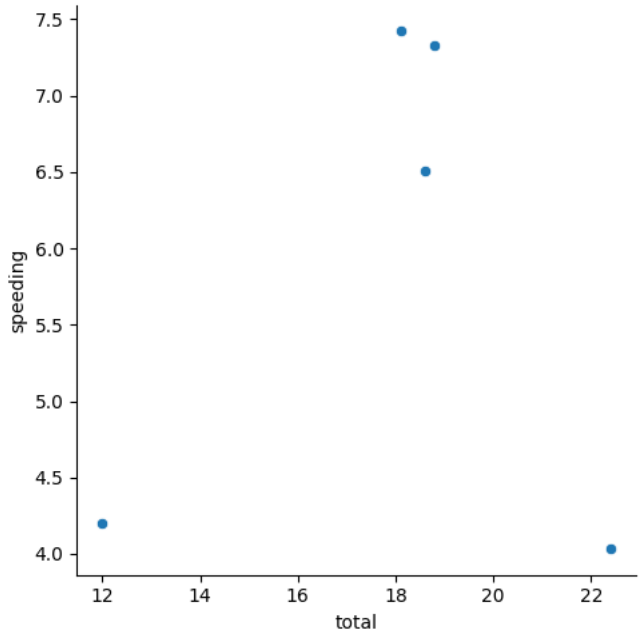
```
<ipython-input-35-dc78ed30bf49>:1: UserWarning:

`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(smalldata["total"])
<Axes: xlabel='total', ylabel='Density'>
```




```
inference:  The distribution plot of "total" in the "smalldata" likely illustrates the frequency distribution of the "total" variable,
            allowing us to observe its underlying data distribution,which can be useful for understanding its central tendency and sprea
```

```
sns.relplot(x="total",y="speeding",data=smalldata)
```

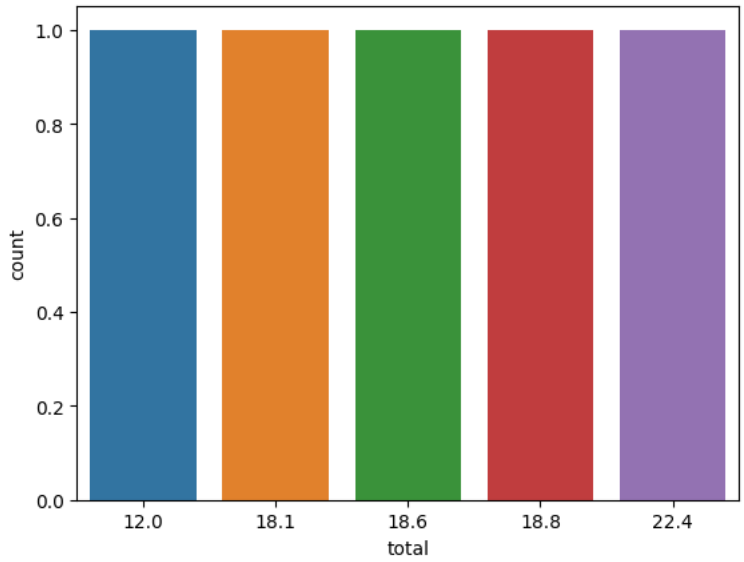
```
<seaborn.axisgrid.FacetGrid at 0x7d6b53b3e8f0>
```




```
inference:  The relational plot (relplot) of "total" vs. "speeding" likely displays the individual data points and their relationship, he
              or trends in the data, such as correlations or clusters between the two variables.
```

```
sns.countplot(x="total",data=smalldata)
```

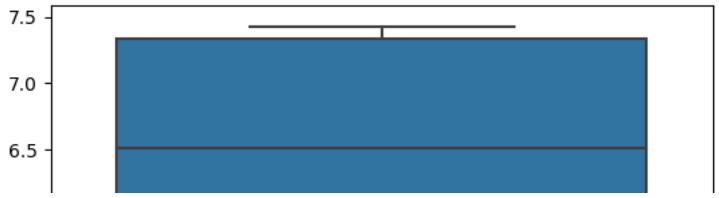
```
<Axes: xlabel='total', ylabel='count'>
```




```
inference:  The count plot of "total" in the "smalldata" dataset likely shows the frequency of each unique value in
            the "total" variable, providing insight into the distribution of these values within the dataset.
```

```
sns.boxplot(smalldata.speeding)
```

```
<Axes: >
```




```
inference:  The box plot of the "speeding" variable in the "smalldata" likely displays the distribution of speeding rates,
            showing key statistics such as the median, quartiles, and any potential outliers in the data.
```