Seaborn_python

April 24, 2022

[1]:
```
import seaborn as sns
```

[2]:
```
sns.get_dataset_names()
```

[2]:
```
['anagrams',
 'anscombe',
 'attention',
 'brain_networks',
 'car_crashes',
 'diamonds',
 'dots',
 'exercise',
 'flights',
 'fmri',
 'gammas',
 'geyser',
 'iris',
 'mpg',
 'penguins',
 'planets',
 'taxis',
 'tips',
 'titanic']
```

[4]:
```
tips=sns.load_dataset("tips")
iris=sns.load_dataset("iris")
titanic=sns.load_dataset("titanic")
planets=sns.load_dataset("planets")
```

[5]:
```
tips
```

[5]:

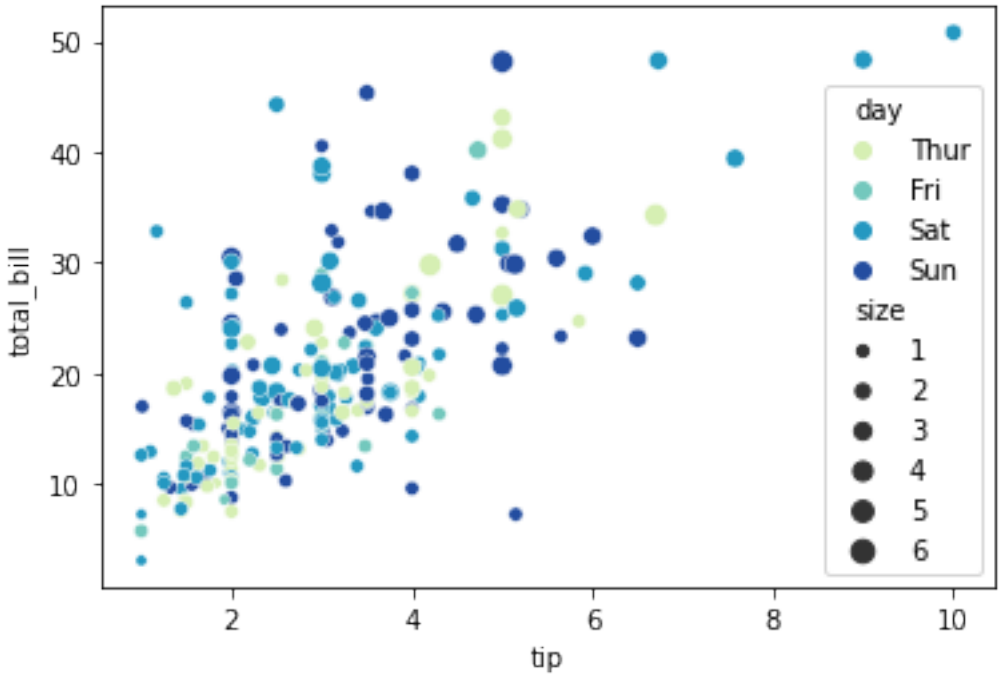
	total_bill	tip	sex	smoker	day	time	size
0	16.99	1.01	Female	No	Sun	Dinner	2
1	10.34	1.66	Male	No	Sun	Dinner	3
2	21.01	3.50	Male	No	Sun	Dinner	3
3	23.68	3.31	Male	No	Sun	Dinner	2
4	24.59	3.61	Female	No	Sun	Dinner	4
..	…	…	…	…	…	…	…

```
239        29.03  5.92    Male     No   Sat  Dinner     3
240        27.18  2.00  Female    Yes   Sat  Dinner     2
241        22.67  2.00    Male    Yes   Sat  Dinner     2
242        17.82  1.75    Male     No   Sat  Dinner     2
243        18.78  3.00  Female     No  Thur  Dinner     2

[244 rows x 7 columns]
```

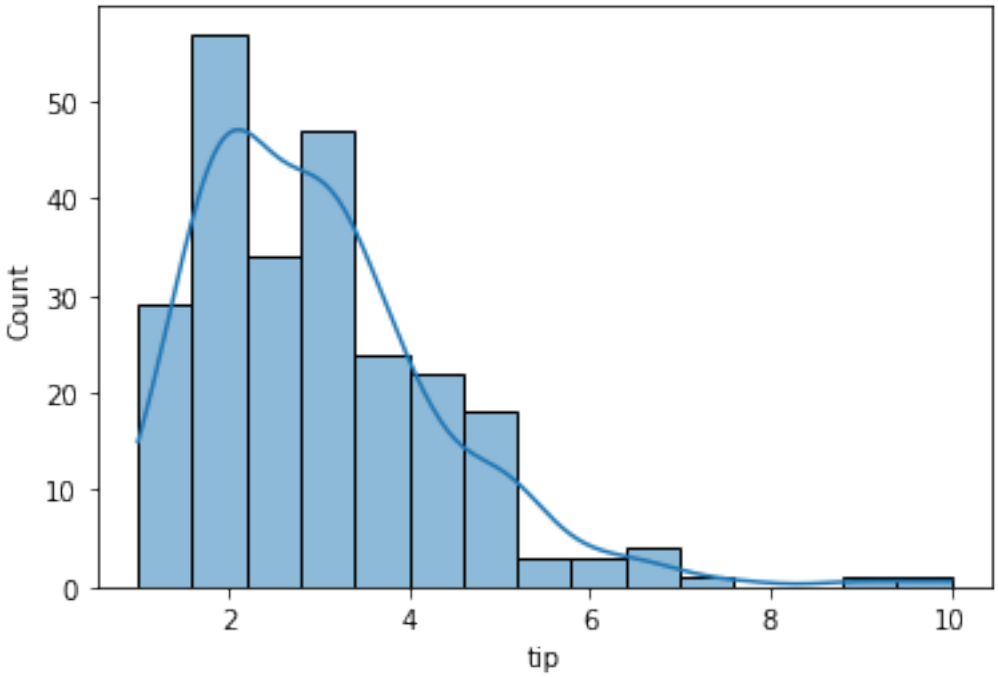
[8]:
```
sns.scatterplot(x='tip', y='total_bill',␣
↪data=tips,hue='day',size='size',palette='YlGnBu')
```

[8]: <AxesSubplot:xlabel='tip', ylabel='total_bill'>



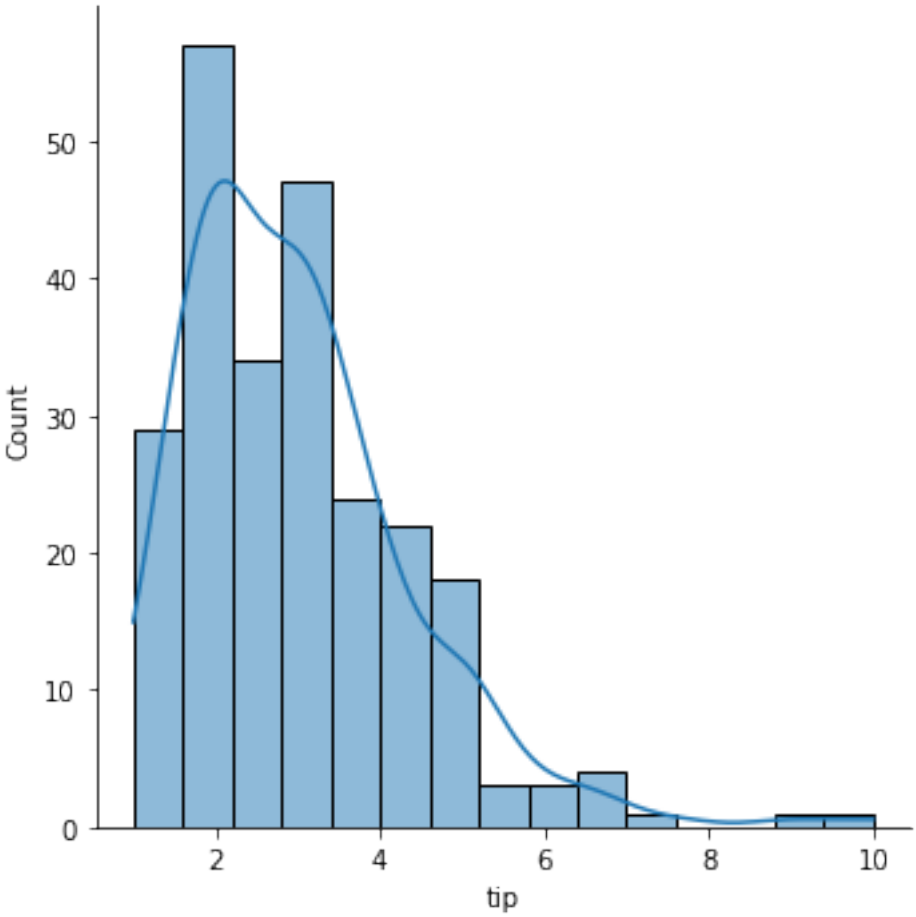
[9]:
```
sns.histplot(tips['tip'],kde=True,bins=15)
```

[9]: <AxesSubplot:xlabel='tip', ylabel='Count'>



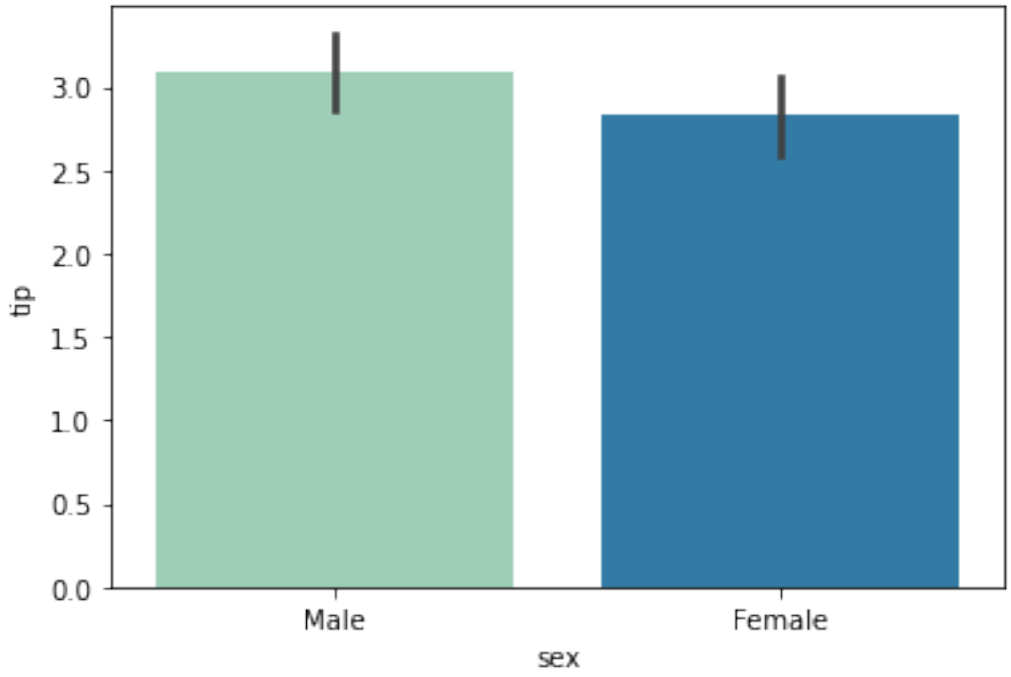
[10]:
```
sns.displot(tips['tip'],kde=True,bins=15)
```

[10]: <seaborn.axisgrid.FacetGrid at 0x7fccc6329670>



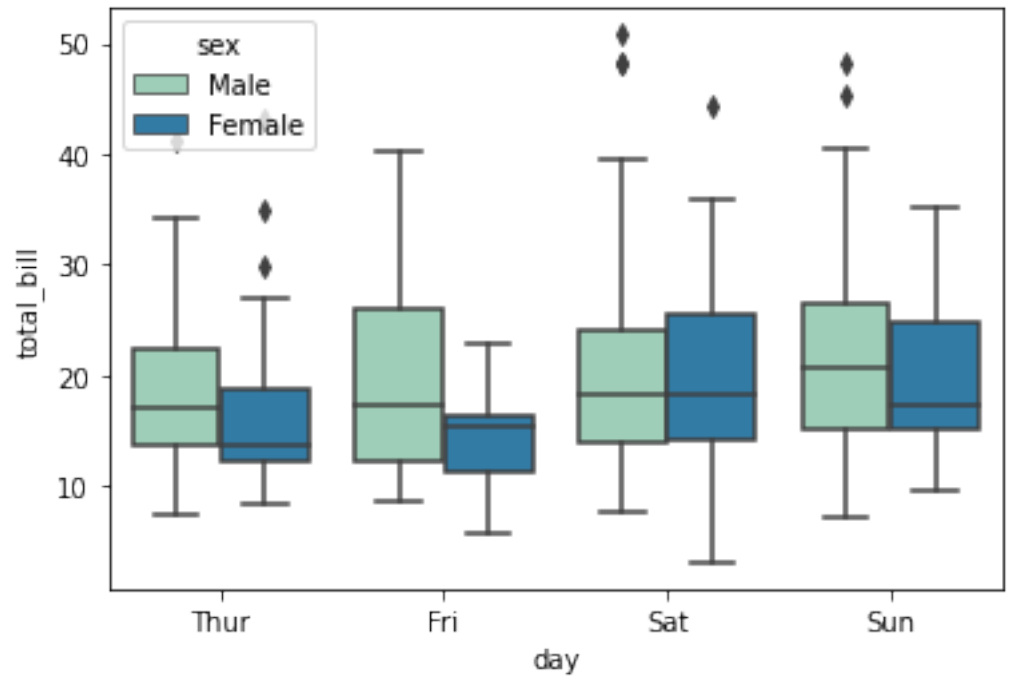
[11]:
```
sns.barplot(x='sex',y='tip',data=tips,palette="YlGnBu")
```

[11]:
```
<AxesSubplot:xlabel='sex', ylabel='tip'>
```



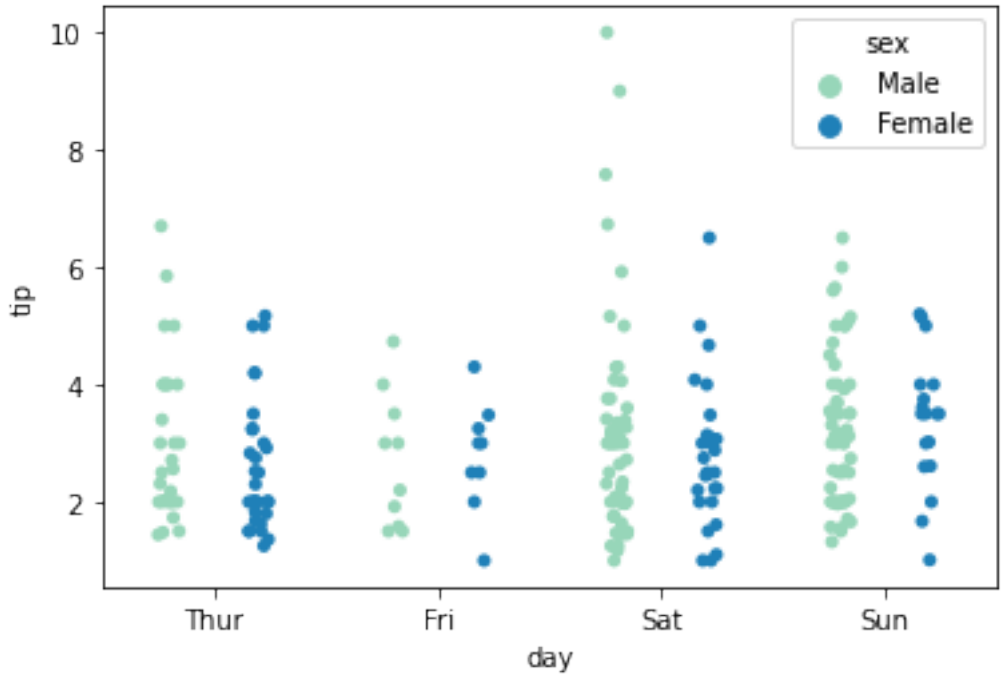
[14]:
```
sns.boxplot(x="day",y="total_bill", data=tips,hue="sex",palette="YlGnBu")
```

[14]:
```
<AxesSubplot:xlabel='day', ylabel='total_bill'>
```



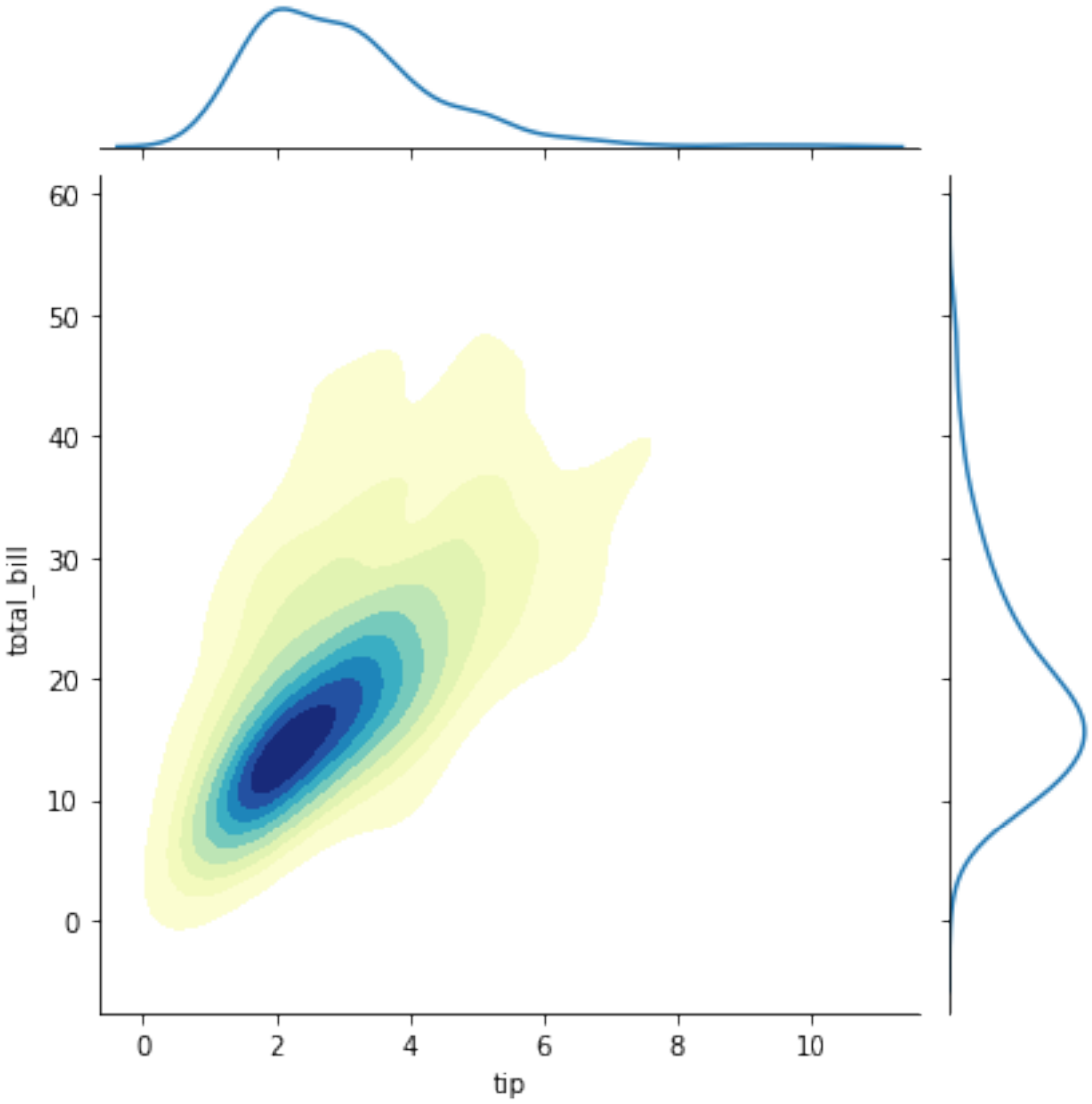
[16]:
```
sns.stripplot(x='day',y='tip',data=tips,hue='sex',palette='YlGnBu',dodge=True)
```

[16]: <AxesSubplot:xlabel='day', ylabel='tip'>



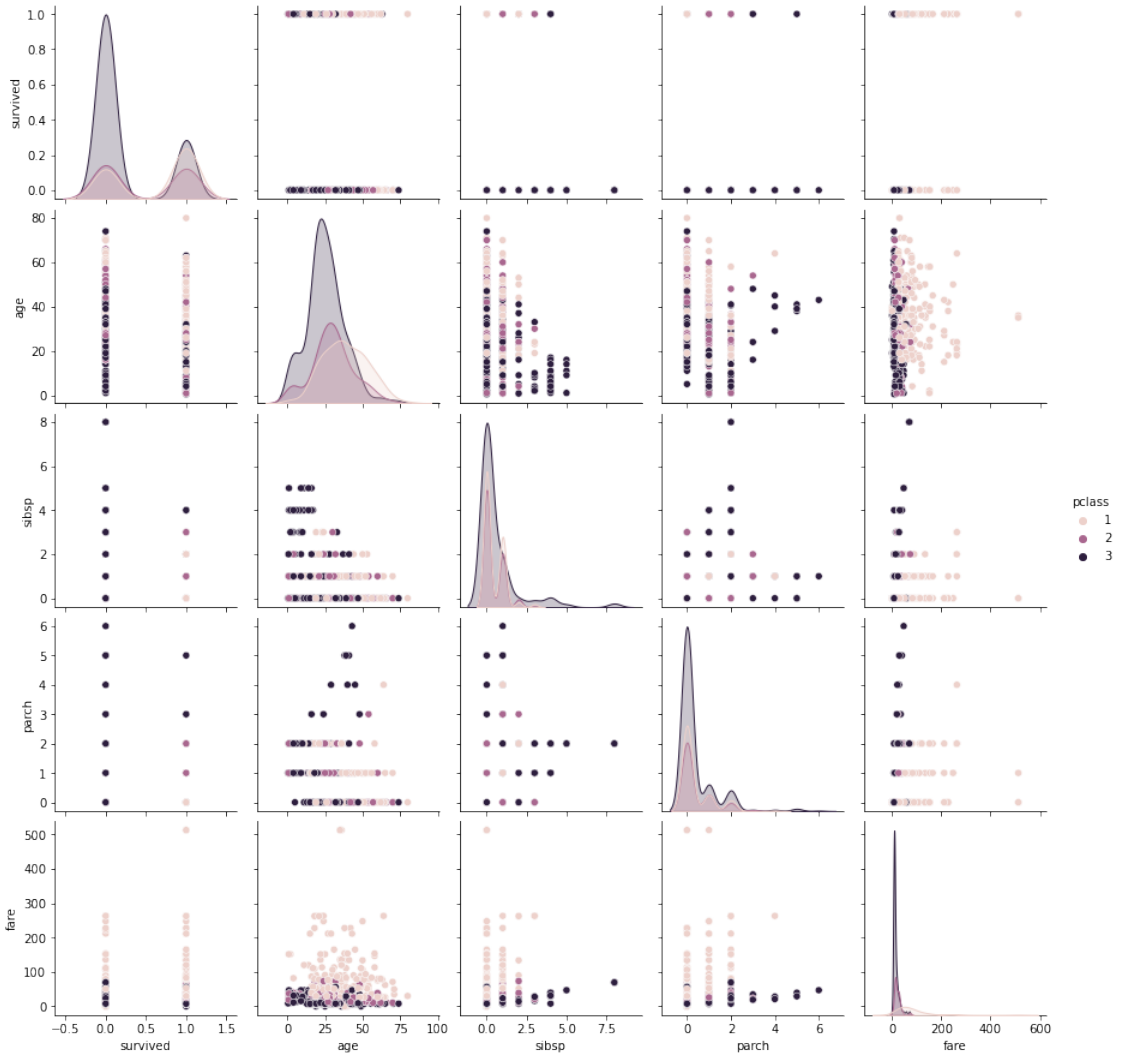
[25]:
```
sns.
↪jointplot(x='tip',y='total_bill',data=tips,kind="kde",shade=True,cmap='YlGnBu')
```

[25]: <seaborn.axisgrid.JointGrid at 0x7fccc8313220>



[27]:
```
sns.pairplot(titanic.select_dtypes(['number']),hue='pclass')
```

[27]: <seaborn.axisgrid.PairGrid at 0x7fccc8486460>



[28]:
```
titanic.corr()
```

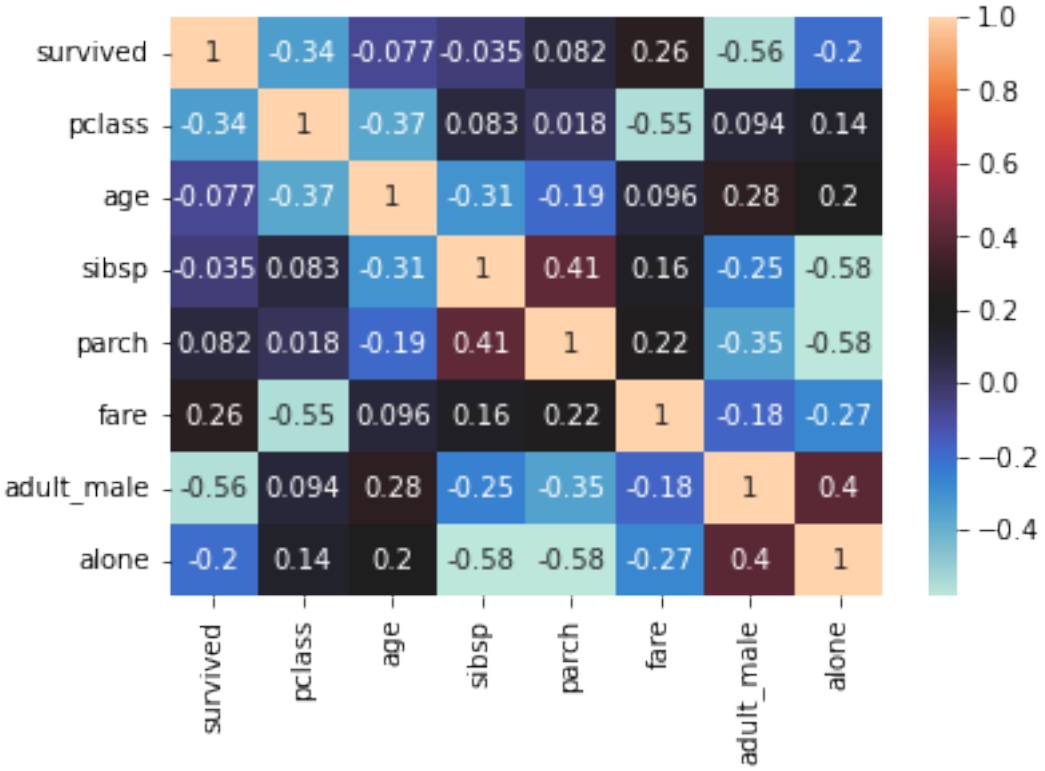
[28]:

	survived	pclass	age	sibsp	parch	fare	adult_male	alone
survived	1.000000	-0.338481	-0.077221	-0.035322	0.081629	0.257307	-0.557080	-0.203367
pclass	-0.338481	1.000000	-0.369226	0.083081	0.018443	-0.549500	0.094035	0.135207
age	-0.077221	-0.369226	1.000000	-0.308247	-0.189119	0.096067	0.280328	0.198270
sibsp	-0.035322	0.083081	-0.308247	1.000000	0.414838	0.159651	-0.253586	-0.584471
parch	0.081629	0.018443	-0.189119	0.414838	1.000000	0.216225	-0.349943	-0.583398
fare	0.257307	-0.549500	0.096067	0.159651	0.216225	1.000000	-0.182024	-0.271832
adult_male	-0.557080	0.094035	0.280328	-0.253586	-0.349943	-0.182024	1.000000	0.404744
alone	-0.203367	0.135207	0.198270	-0.584471	-0.583398	-0.271832	0.404744	1.000000

```
pclass        0.094035  0.135207
age           0.280328  0.198270
sibsp        -0.253586 -0.584471
parch        -0.349943 -0.583398
fare         -0.182024 -0.271832
adult_male    1.000000  0.404744
alone         0.404744  1.000000
```

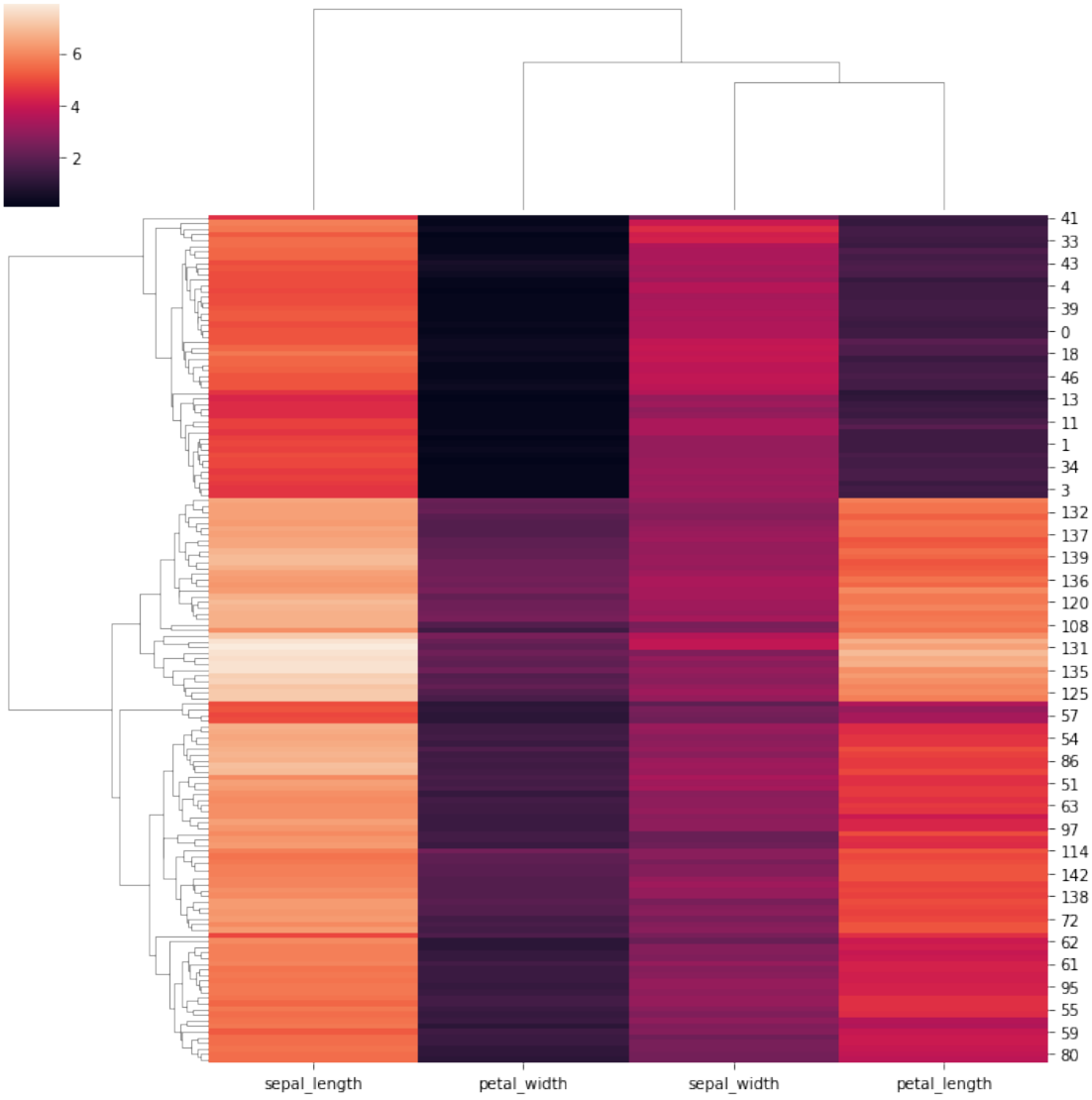
[29]:
```
sns.heatmap(titanic.corr(),annot=True,cmap="icefire")
```

[29]: <AxesSubplot:>



[31]:
```
sns.clustermap(iris.drop("species",axis=1))
```

[31]: <seaborn.matrix.ClusterGrid at 0x7fccaafb3fa0>


6
4
2
41
33
43
4
39
0
18
46
13
11
1
34
3
132
137
139
136
120
108
131
135
125
57
54
86
51
63
97
114
142
138
72
62
61
95
55
59
80
sepal_length
petal_width
sepal_width
petal_length