[0]

```
pip install seaborn
```

```
Requirement already satisfied: seaborn in c:\users\anaghe\anaconda3\lib\site-packages (0.12.2)
Requirement already satisfied: numpy!=1.24.0,>=1.17 in c:\users\anaghe\anaconda3\lib\site-packages (from seaborn) (1.24.3)
Requirement already satisfied: pandas>=0.25.1 in c:\users\anaghe\anaconda3\lib\site-packages (from seaborn) (1.5.3)
Requirement already satisfied: matplotlib!=3.6.1,>=3.1 in c:\users\anaghe\anaconda3\lib\site-packages (from seaborn) (3.7.1)
Requirement already satisfied: contourpy>=1.0.1 in c:\users\anaghe\anaconda3\lib\site-packages (from matplotlib!=3.6.1,>=3.1->seaborn) (1.0.5)
Requirement already satisfied: cycler>=0.10 in c:\users\anaghe\anaconda3\lib\site-packages (from matplotlib!=3.6.1,>=3.1->seaborn) (0.11.0)
Requirement already satisfied: fonttools>=4.22.0 in c:\users\anaghe\anaconda3\lib\site-packages (from matplotlib!=3.6.1,>=3.1->seaborn) (4.25.0)
Requirement already satisfied: kiwisolver>=1.0.1 in c:\users\anaghe\anaconda3\lib\site-packages (from matplotlib!=3.6.1,>=3.1->seaborn) (1.4.4)
Requirement already satisfied: packaging>=20.0 in c:\users\anaghe\anaconda3\lib\site-packages (from matplotlib!=3.6.1,>=3.1->seaborn) (23.0)
Requirement already satisfied: pillow>=6.2.0 in c:\users\anaghe\anaconda3\lib\site-packages (from matplotlib!=3.6.1,>=3.1->seaborn) (9.4.0)
Requirement already satisfied: pyparsing>=2.3.1 in c:\users\anaghe\anaconda3\lib\site-packages (from matplotlib!=3.6.1,>=3.1->seaborn) (3.0.9)
Requirement already satisfied: python-dateutil>=2.7 in c:\users\anaghe\anaconda3\lib\site-packages (from matplotlib!=3.6.1,>=3.1->seaborn) (2.8.2)
Requirement already satisfied: pytz>=2020.1 in c:\users\anaghe\anaconda3\lib\site-packages (from pandas>=0.25.1->seaborn) (2022.7)
Requirement already satisfied: six>=1.5 in c:\users\anaghe\anaconda3\lib\site-packages (from python-dateutil>=2.7->matplotlib!=3.6.1,>=3.1->seaborn) (1.16.0)
Note: you may need to restart the kernel to use updated packages.
```

[1]

```
import seaborn as sns
```

[2]

```
sns.get_dataset_names()
```

[2]:

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

[3]

```
tips=sns.load_dataset("tips")
titanic=sns.load_dataset("titanic")
iris=sns.load_dataset("iris")
planets=sns.load_dataset("planets")
```

[4]

```
tips
```

[4]:

| | 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 | Sun | Dinner | 3 |
| **240** | 27.18 | 2.00 | Female | Yes | Sun | Dinner | 2 |
| **241** | 22.67 | 2.00 | Male | Yes | Sun | Dinner | 2 |
| **242** | 17.82 | 1.75 | Male | No | Sun | Dinner | 2 |
| **243** | 18.78 | 3.00 | Female | No | Thur | Dinner | 2 |

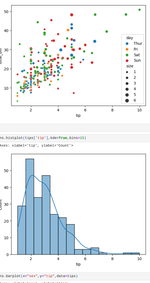
244 rows × 7 columns

[5]

```
sns.scatterplot(x="tip", y="total_bill",data=tips,hue="day",size="size")
```

[5]:

```
<Axes: xlabel='tip', ylabel='total_bill'>
```



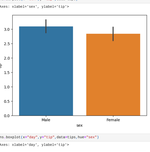

[6] [ ]

[7]

```
sns.histplot(data=tips,x="tips",kde=True,bins=15)
```

[6]:

```
<Axes: xlabel='tip', ylabel='Count'>
```

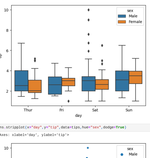



[8]

```
sns.barplot(x="sex",y="tip",data=tips)
```

[8]:

```
<Axes: xlabel='sex', ylabel='tip'>
```

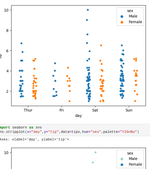



[9]

```
sns.boxplot(x="day",y="tip",data=tips,hue="sex")
```

[9]:

```
<Axes: xlabel='day', ylabel='tip'>
```

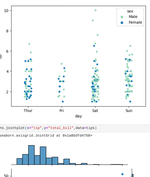



[10]

```
sns.stripplot(x="day",y="tip",data=tips,hue="sex",dodge=True)
```

[10]:

```
<Axes: xlabel='day', ylabel='tip'>
```

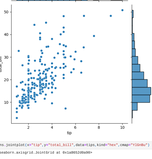



[11]

```
import seaborn as sns
sns.stripplot(x="day",y="tip",data=tips,hue="sex",palette="ch:dim=")
```

[11]:

```
<Axes: xlabel='day', ylabel='tip'>
```

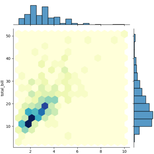



[12]

```
sns.jointplot(x="tip",y="total_bill",data=tips)
```

[12]:

```
<seaborn.axisgrid.JointGrid at 0x1a0d5f2e7c0>
```

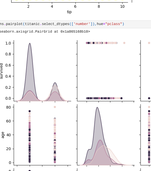



[13]

```
sns.jointplot(x="tip",y="total_bill",data=tips,kind="hex",cmap="ch:dim")
```

[13]:

```
<seaborn.axisgrid.JointGrid at 0x1a0d6320a60>
```




[14]

```
sns.pairplot(titanic,diag_kind="number",hue="pclass")
```

[14]:

```
<seaborn.axisgrid.PairGrid at 0x1a0d6140ca0>
```

[15]

```
titanic.corr()
```

[15]:

| | 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 | 0.281928 | 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 | 0.281928 | -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 |

[16]

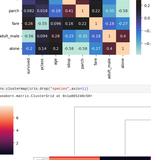
```
C:\Users\anaghe\AppData\Local\Temp\ipykernel_14772\2954377708.py:1: FutureWarning: The default value of numeric_only in DataFrame.corr is deprecated. In a future version, it will de
fault to False. Select only valid columns or specify the value of numeric_only to silence this warning.
  titanic.corr()
```

[17]

```
C:\Users\anaghe\AppData\Local\Temp\ipykernel_14772\3298212426.py:1: FutureWarning: The default value of numeric_only in DataFrame.corr is deprecated. In a future version, it will de
fault to False. Select only valid columns or specify the value of numeric_only to silence this warning.
  sns.heatmap(titanic.corr(),annot=True,cmap="Inferno")
```

[17]:

```
<Axes: >
```

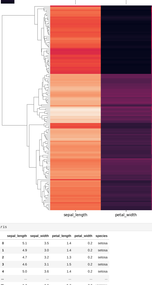



[18]

```
sns.clustermap(iris.drop("species",axis=1))
```

[18]:

```
<seaborn.matrix.ClusterGrid at 0x1a0d8114e0>
```




[19]

```
iris
```

[19]:

| | sepal_length | sepal_width | petal_length | petal_width | species |
|---|---|---|---|---|---|
| **0** | 5.1 | 3.5 | 1.4 | 0.2 | setosa |
| **1** | 4.9 | 3.0 | 1.4 | 0.2 | setosa |
| **2** | 4.7 | 3.2 | 1.3 | 0.2 | setosa |
| **3** | 4.6 | 3.1 | 1.5 | 0.2 | setosa |
| **4** | 5.0 | 3.6 | 1.4 | 0.2 | setosa |
| **...** | ... | ... | ... | ... | ... |
| **145** | 6.7 | 3.0 | 5.2 | 2.3 | virginica |
| **146** | 6.3 | 2.5 | 5.0 | 1.9 | virginica |
| **147** | 6.5 | 3.0 | 5.2 | 2.0 | virginica |
| **148** | 6.2 | 3.4 | 5.4 | 2.3 | virginica |
| **149** | 5.9 | 3.0 | 5.1 | 1.8 | virginica |

150 rows × 5 columns

[ ] [ ]