```
pip install seaborn
```

```
Requirement already satisfied: seaborn in /usr/local/lib/python3.11/dist-packages (0.13.2)
Requirement already satisfied: numpy!=1.24.0,>=1.20 in /usr/local/lib/python3.11/dist-packages (from seaborn) (1.26.4)
Requirement already satisfied: pandas>=1.2 in /usr/local/lib/python3.11/dist-packages (from seaborn) (2.2.2)
Requirement already satisfied: matplotlib!=3.6.1,>=3.4 in /usr/local/lib/python3.11/dist-packages (from seaborn) (3.10.0
Requirement already satisfied: contourpy>=1.0.1 in /usr/local/lib/python3.11/dist-packages (from matplotlib!=3.6.1,>=3.4
Requirement already satisfied: cycler>=0.10 in /usr/local/lib/python3.11/dist-packages (from matplotlib!=3.6.1,>=3.4->se
Requirement already satisfied: fonttools>=4.22.0 in /usr/local/lib/python3.11/dist-packages (from matplotlib!=3.6.1,>=3.
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Requirement already satisfied: packaging>=20.0 in /usr/local/lib/python3.11/dist-packages (from matplotlib!=3.6.1,>=3.4-
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Requirement already satisfied: python-dateutil>=2.7 in /usr/local/lib/python3.11/dist-packages (from matplotlib!=3.6.1,>
Requirement already satisfied: pytz>=2020.1 in /usr/local/lib/python3.11/dist-packages (from pandas>=1.2->seaborn) (2025
Requirement already satisfied: tzdata>=2022.7 in /usr/local/lib/python3.11/dist-packages (from pandas>=1.2->seaborn) (20
Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.11/dist-packages (from python-dateutil>=2.7->matplotli
```

```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
```

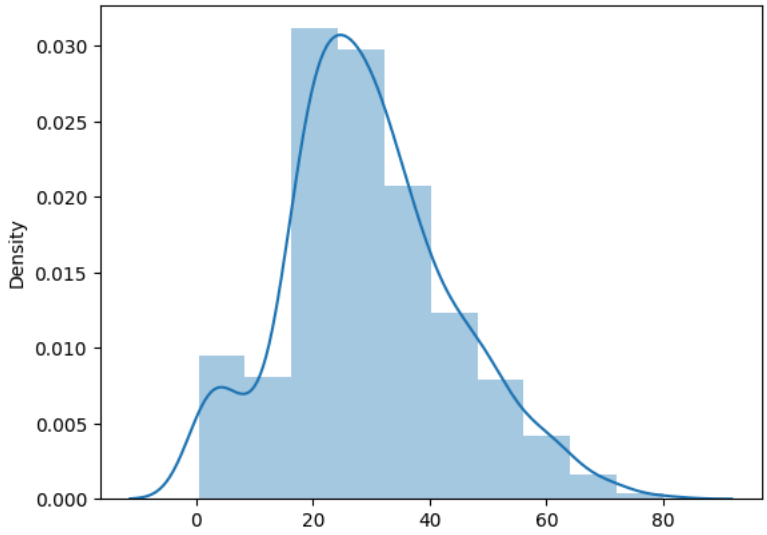
```
dataset = sns.load_dataset('titanic')
dataset.head()
```

	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_male	deck	embark_town	alive	alone
0	0	3	male	22.0	1	0	7.2500	S	Third	man	True	NaN	Southampton	no	False
1	1	1	female	38.0	1	0	71.2833	C	First	woman	False	C	Cherbourg	yes	False
2	1	3	female	26.0	0	0	7.9250	S	Third	woman	False	NaN	Southampton	yes	True
3	1	1	female	35.0	1	0	53.1000	S	First	woman	False	C	Southampton	yes	False
4	0	3	male	35.0	0	0	8.0500	S	Third	man	True	NaN	Southampton	no	True

Next steps: Generate code with dataset | View recommended plots | New interactive sheet

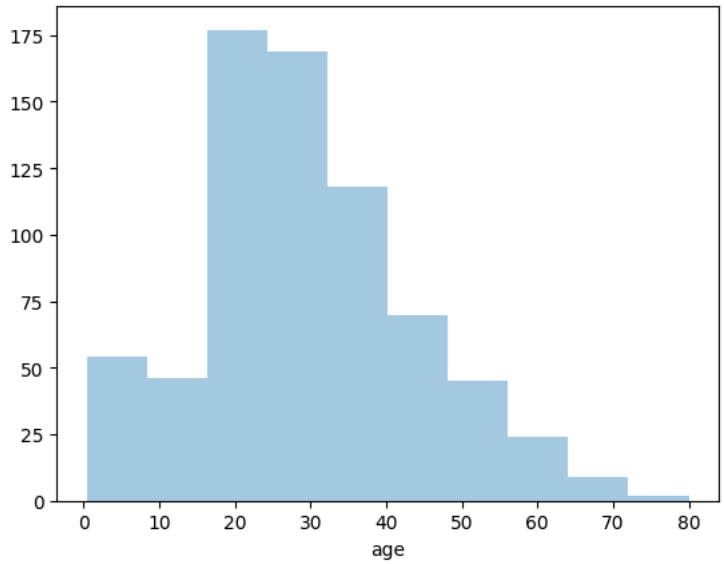
```
sns.distplot(x = dataset['age'], bins = 10)
```

```
<ipython-input-4-0edf267bf961>: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(x = dataset['age'], bins = 10)
<Axes: ylabel='Density'>
```



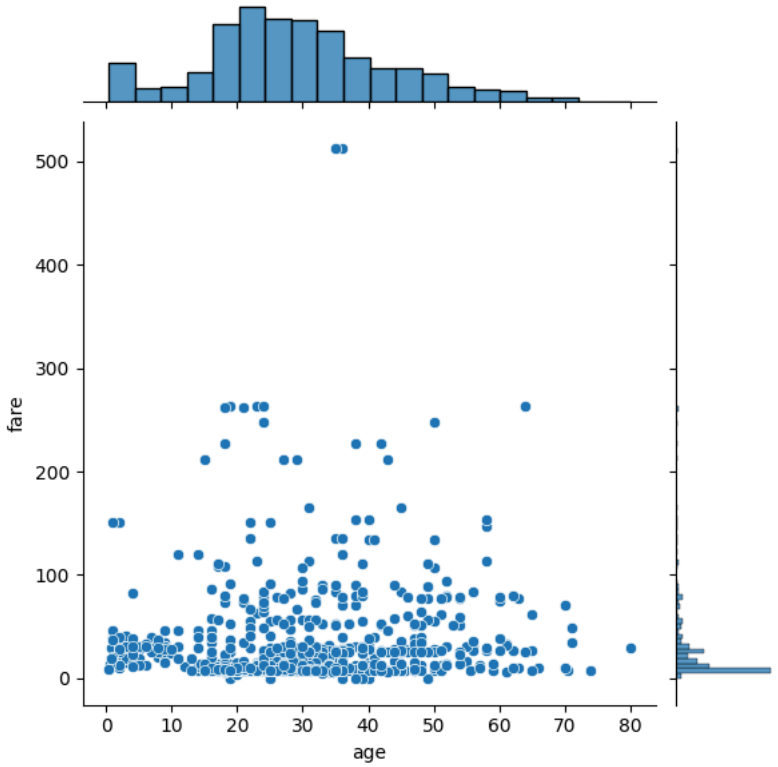

```
sns.distplot(dataset['age'], bins = 10,kde=False)
```

```
<ipython-input-5-f2dca48d8ca1>: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(dataset['age'], bins = 10,kde=False)
<Axes: xlabel='age'>
```



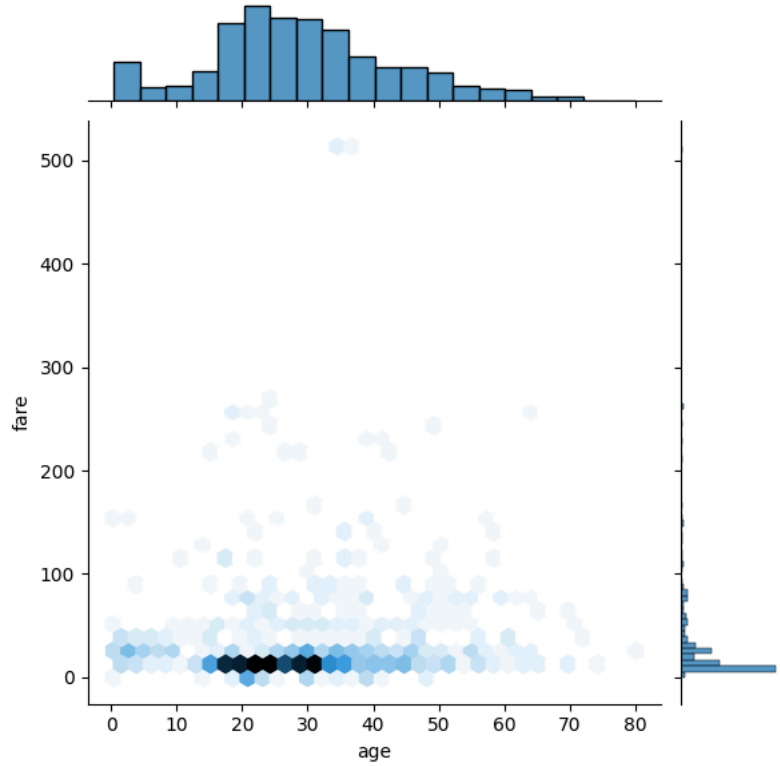

```
# For Plot 1
sns.jointplot(x = dataset['age'], y = dataset['fare'], kind =
'scatter')
```

```
<seaborn.axisgrid.JointGrid at 0x7f200c663410>
```



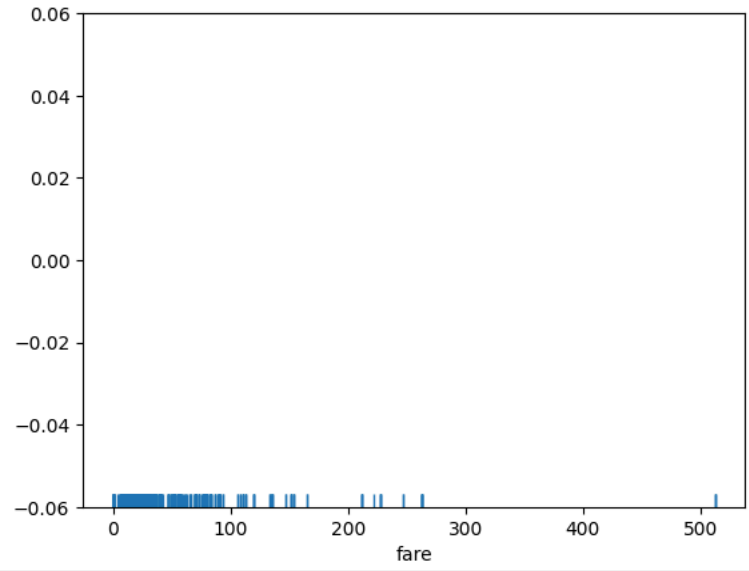

```
# For Plot 2
sns.jointplot(x = dataset['age'], y = dataset['fare'], kind = 'hex')
```

```
<seaborn.axisgrid.JointGrid at 0x7f2007f3c1d0>
```



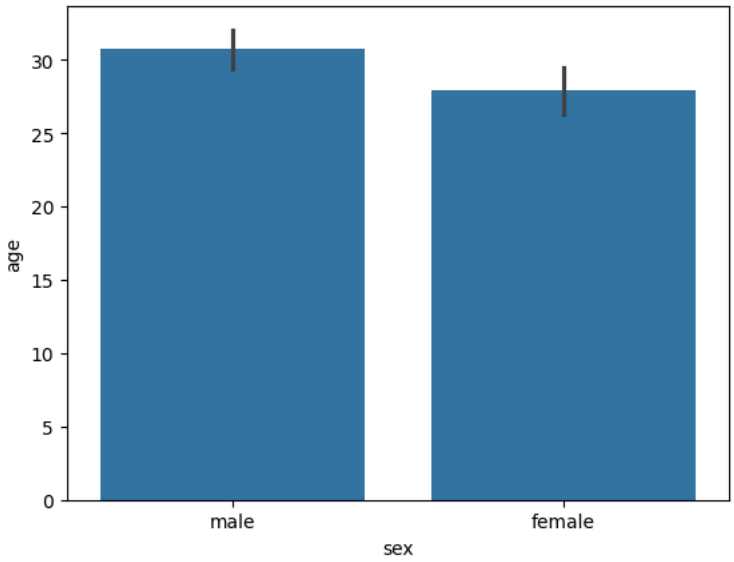

```
#The Rug Plot
sns.rugplot(dataset['fare'])
```

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



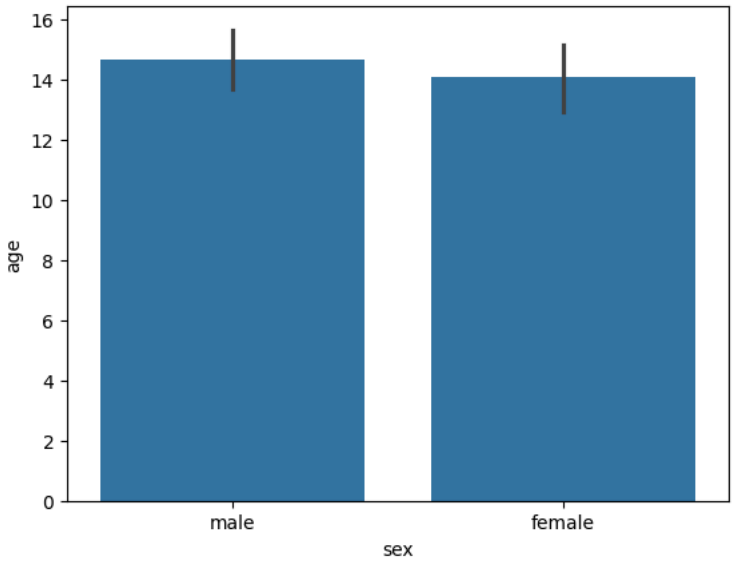

```
#The Bar Plot
sns.barplot(x='sex', y='age', data=dataset)
```

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



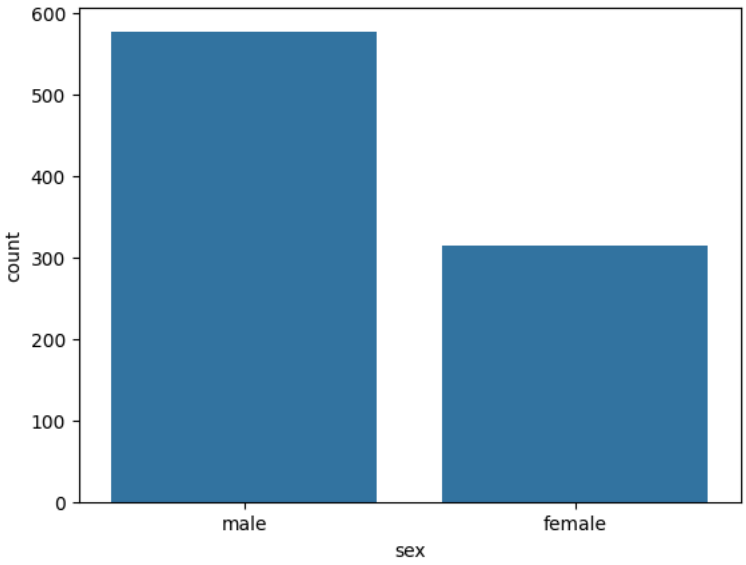

```
sns.barplot(x='sex', y='age', data=dataset, estimator=np.std)
```

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



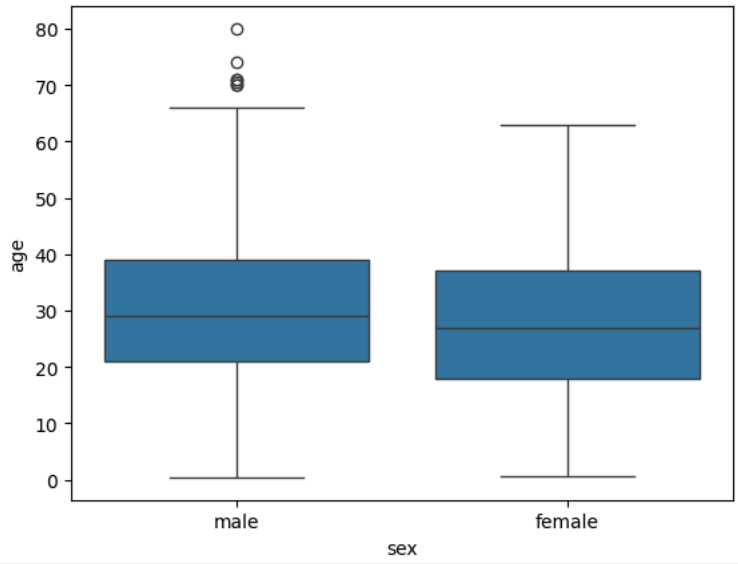

```
#The Count Plot
sns.countplot(x='sex', data=dataset)
```

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



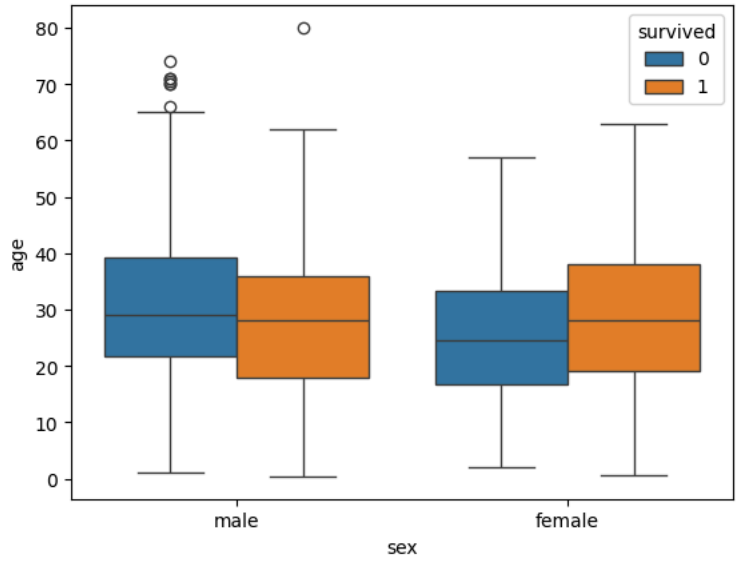
```
#The Box Plot
sns.boxplot(x='sex', y='age', data=dataset)
```

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



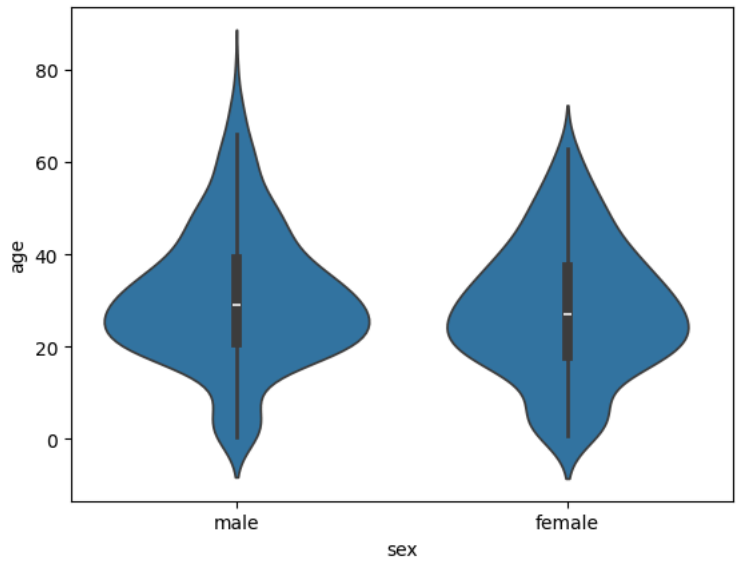

```
sns.boxplot(x='sex', y='age', data=dataset, hue="survived")
```

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



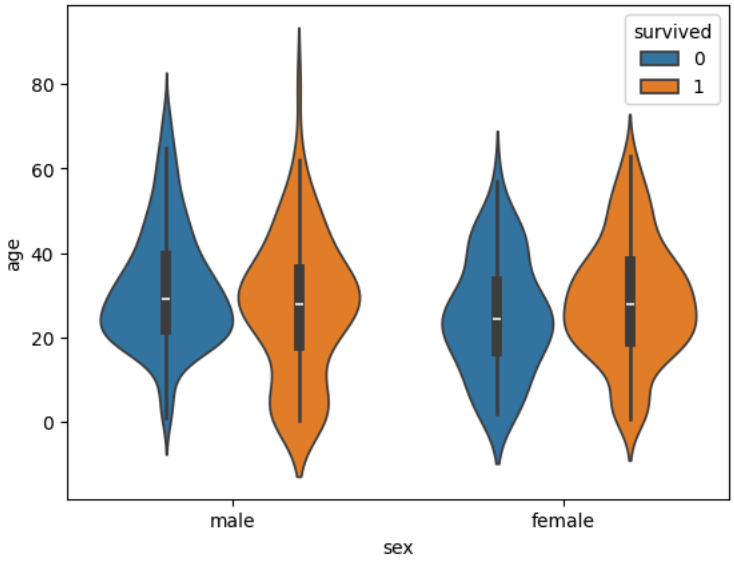

```
#The Violin Plot
sns.violinplot(x='sex', y='age', data=dataset)
```

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



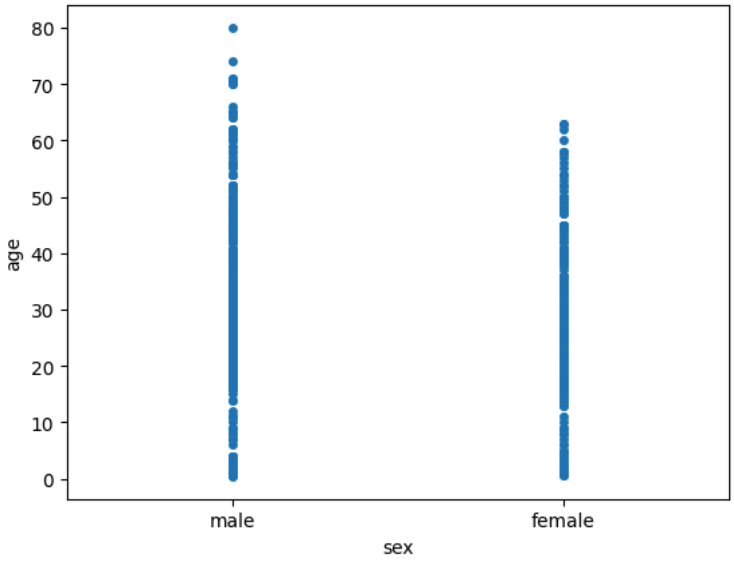
```
sns.violinplot(x='sex', y='age', data=dataset, hue='survived')
```

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



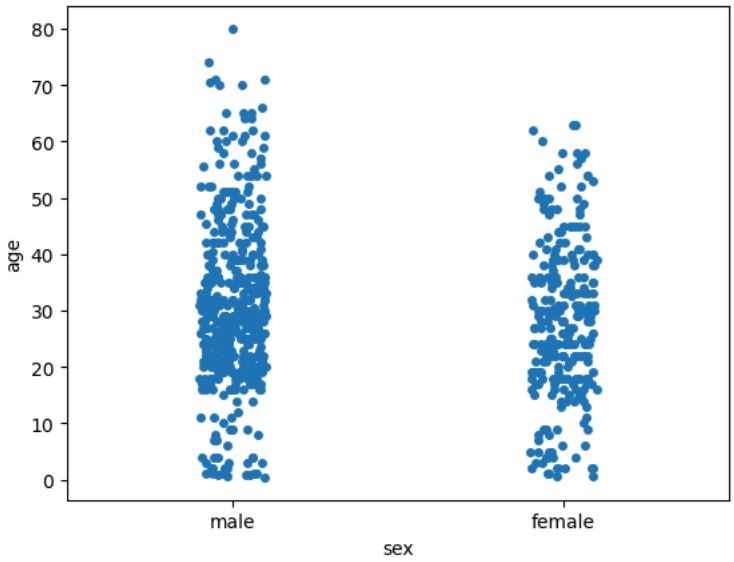

```
#The Strip Plot
sns.stripplot(x='sex', y='age', data=dataset, jitter=False)
```

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



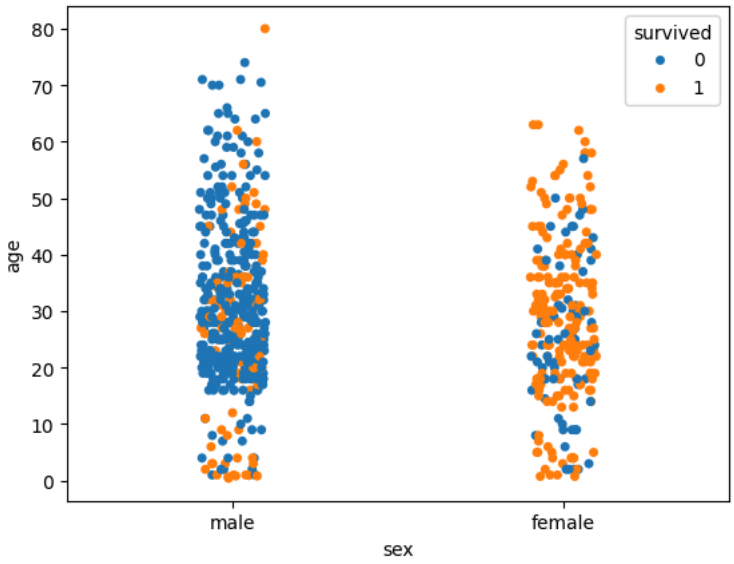

```
sns.stripplot(x='sex', y='age', data=dataset, jitter=True)
```

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



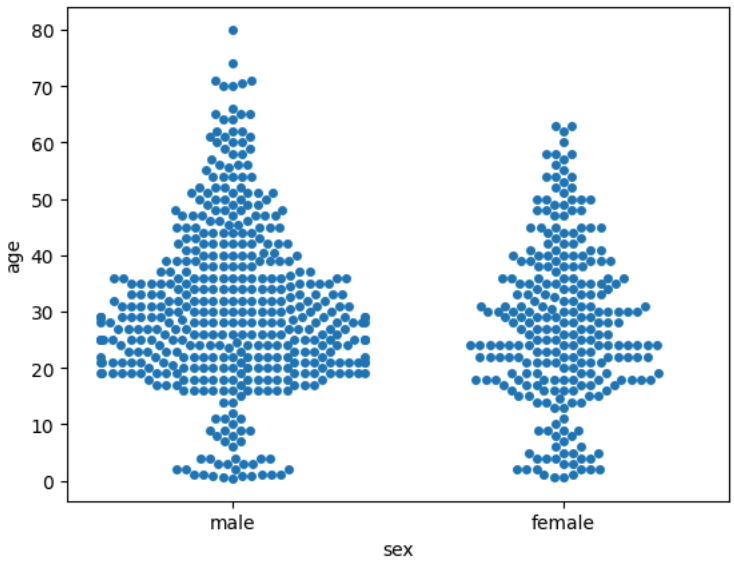

```
sns.stripplot(x='sex', y='age', data=dataset, jitter=True, hue='survived')
```

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



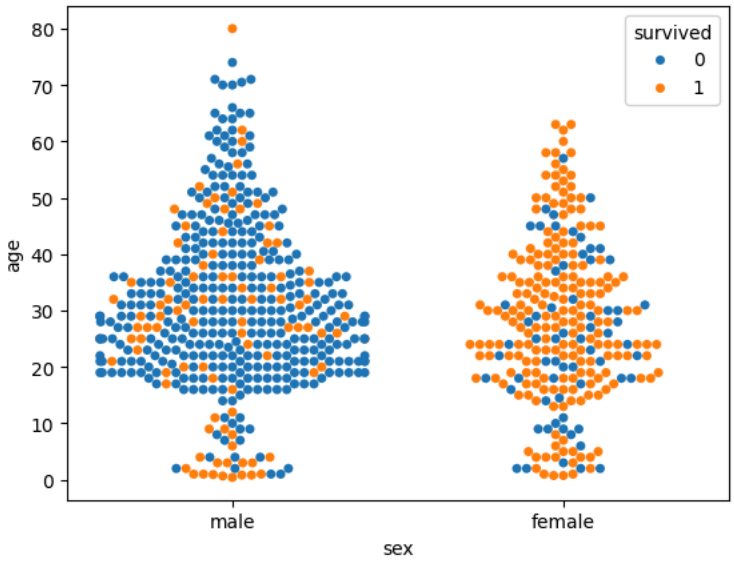

```
#The Swarm Plot
sns.swarmplot(x='sex', y='age', data=dataset)
```

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



```
sns.swarmplot(x='sex', y='age', data=dataset, hue='survived')
```

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




```
#Heat Maps
dataset = sns.load_dataset('titanic')
dataset.head()
```

	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_male	deck	embark_town	alive	alone
0	0	3	male	22.0	1	0	7.2500	S	Third	man	True	NaN	Southampton	no	False
1	1	1	female	38.0	1	0	71.2833	C	First	woman	False	C	Cherbourg	yes	False
2	1	3	female	26.0	0	0	7.9250	S	Third	woman	False	NaN	Southampton	yes	True
3	1	1	female	35.0	1	0	53.1000	S	First	woman	False	C	Southampton	yes	False
4	0	3	male	35.0	0	0	8.0500	S	Third	man	True	NaN	Southampton	no	True

Next steps: Generate code with dataset | View recommended plots | New interactive sheet

```
numerical_features = dataset.select_dtypes(include=[np.number])
numerical_features.corr()
```

	survived	pclass	age	sibsp	parch	fare
survived	1.000000	-0.338481	-0.077221	-0.035322	0.081629	0.257307
pclass	-0.338481	1.000000	-0.369226	0.083081	0.018443	-0.549500
age	-0.077221	-0.369226	1.000000	-0.308247	-0.189119	0.096067
sibsp	-0.035322	0.083081	-0.308247	1.000000	0.414838	0.159651
parch	0.081629	0.018443	-0.189119	0.414838	1.000000	0.216225
fare	0.257307	-0.549500	0.096067	0.159651	0.216225	1.000000

```
sns.heatmap(numerical_features.corr(), annot=True)
```

```
<Axes: >
```