

siddhu8

April 15, 2025

```
[1]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
```

```
[1]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
```

```
[2]: dataset = sns.load_dataset( 'titanic' )
```

```
[3]: dataset
```

```
[3]:
```

	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	\
0	0	3	male	22.0	1	0	7.2500	S	Third	
1	1	1	female	38.0	1	0	71.2833	C	First	
2	1	3	female	26.0	0	0	7.9250	S	Third	
3	1	1	female	35.0	1	0	53.1000	S	First	
4	0	3	male	35.0	0	0	8.0500	S	Third	
..	
886	0	2	male	27.0	0	0	13.0000	S	Second	
887	1	1	female	19.0	0	0	30.0000	S	First	
888	0	3	female	NaN	1	2	23.4500	S	Third	
889	1	1	male	26.0	0	0	30.0000	C	First	
890	0	3	male	32.0	0	0	7.7500	Q	Third	

	who	adult_male	deck	embark_town	alive	alone
0	man	True	NaN	Southampton	no	False
1	woman	False	C	Cherbourg	yes	False
2	woman	False	NaN	Southampton	yes	True
3	woman	False	C	Southampton	yes	False
4	man	True	NaN	Southampton	no	True
..
886	man	True	NaN	Southampton	no	True
887	woman	False	B	Southampton	yes	True
888	woman	False	NaN	Southampton	no	False

```

889    man      True    C    Cherbourg    yes    True
890    man      True   NaN    Queenstown    no    True

```

```
[891 rows x 15 columns]
```

```
[4]: dataset.head()
```

```

[4]:   survived  pclass    sex  age  sibsp  parch    fare embarked  class \
0         0        3   male  22.0     1     0   7.2500         S  Third
1         1        1  female  38.0     1     0  71.2833         C  First
2         1        3  female  26.0     0     0   7.9250         S  Third
3         1        1  female  35.0     1     0  53.1000         S  First
4         0        3   male  35.0     0     0   8.0500         S  Third

```

```

      who  adult_male deck  embark_town alive  alone
0    man         True  NaN  Southampton    no  False
1  woman        False    C    Cherbourg   yes  False
2  woman        False  NaN  Southampton   yes   True
3  woman        False    C  Southampton   yes  False
4    man         True  NaN  Southampton    no   True

```

```
[5]: sns.distplot(dataset[ 'fare' ])
```

```

C:\Users\WINDOWS 10\AppData\Local\Temp\ipykernel_1980\3724518416.py: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).

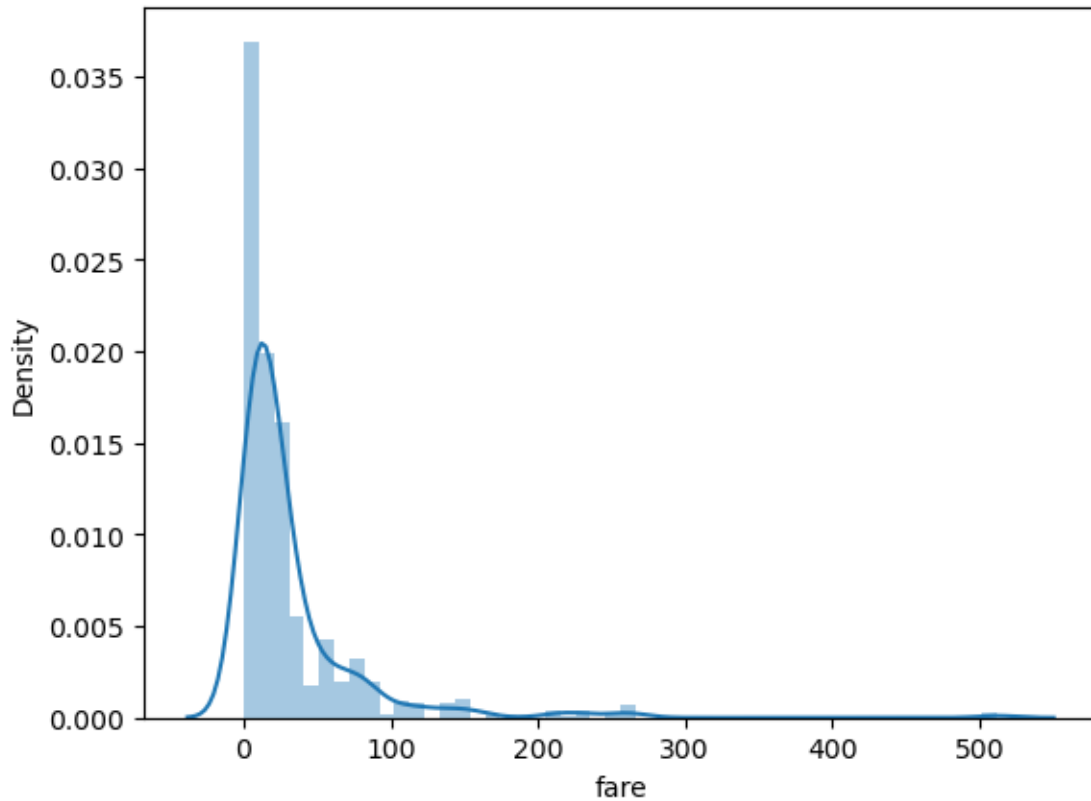
For a guide to updating your code to use the new functions, please see <https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751>

```

sns.distplot(dataset[ 'fare' ])
C:\Users\WINDOWS 10\anaconda3\Lib\site-packages\seaborn\_oldcore.py:1119:
FutureWarning: use_inf_as_na option is deprecated and will be removed in a
future version. Convert inf values to NaN before operating instead.
with pd.option_context('mode.use_inf_as_na', True):

```

```
[5]: <Axes: xlabel='fare', ylabel='Density'>
```



```
[6]: sns.distplot(dataset[ 'fare' ], kde= False )
```

C:\Users\WINDOWS 10\AppData\Local\Temp\ipykernel_1980\1223083531.py:1:

UserWarning:

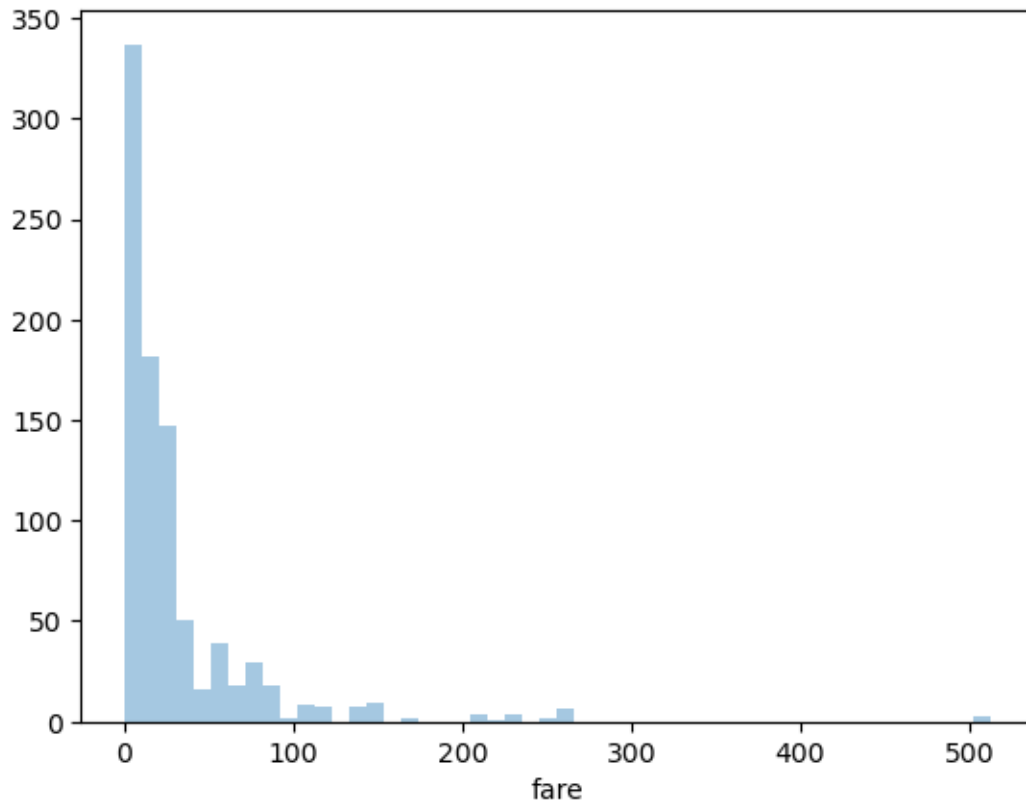
`distplot` is a deprecated function and will be removed in seaborn v0.14.0.

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[ 'fare' ], kde= False )
```

```
[6]: <Axes: xlabel='fare'>
```



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

C:\Users\WINDOWS 10\AppData\Local\Temp\ipykernel_1980\431867688.py:1:

UserWarning:

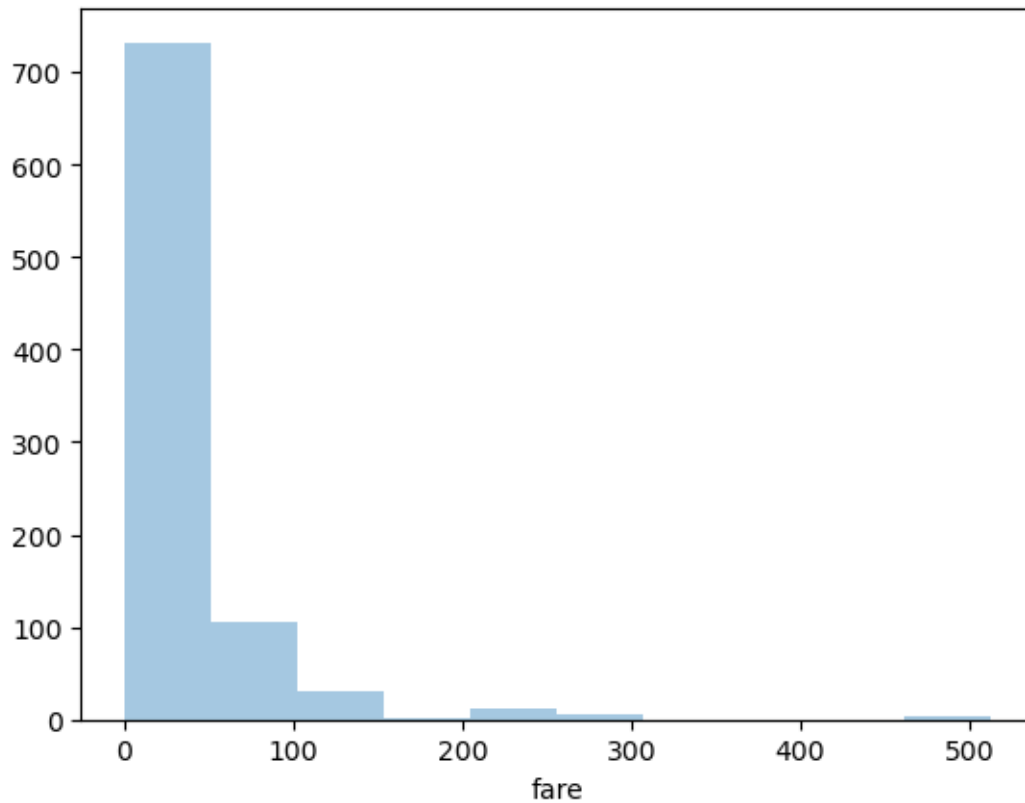
`distplot` is a deprecated function and will be removed in seaborn v0.14.0.

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[ 'fare' ], kde= False , bins= 10 )
```

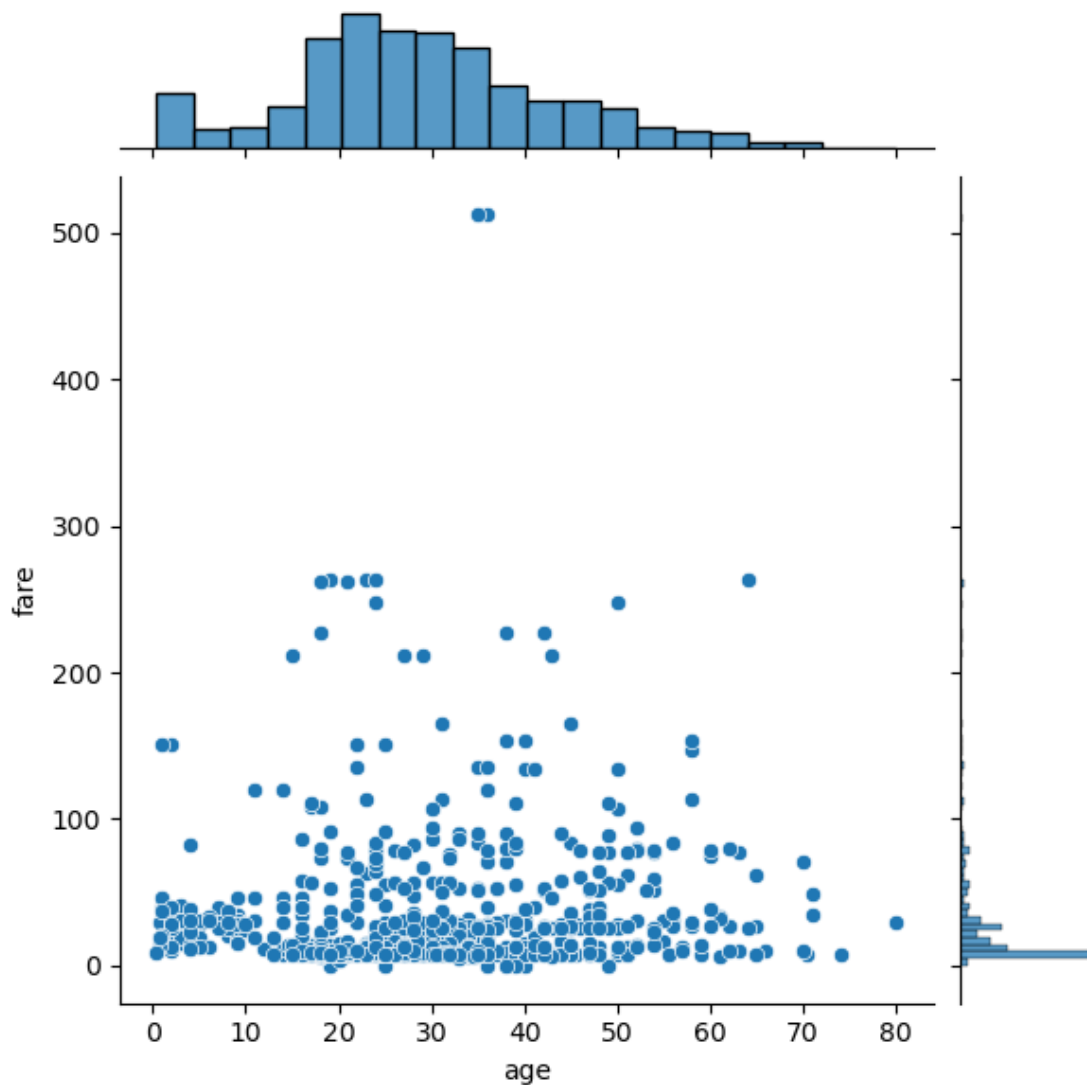
```
[7]: <Axes: xlabel='fare'>
```



```
[8]: sns.jointplot(x= 'age' , y= 'fare' , data=dataset)
```

```
C:\Users\WINDOWS 10\anaconda3\Lib\site-packages\seaborn\_oldcore.py:1119:
FutureWarning: use_inf_as_na option is deprecated and will be removed in a
future version. Convert inf values to NaN before operating instead.
  with pd.option_context('mode.use_inf_as_na', True):
C:\Users\WINDOWS 10\anaconda3\Lib\site-packages\seaborn\_oldcore.py:1119:
FutureWarning: use_inf_as_na option is deprecated and will be removed in a
future version. Convert inf values to NaN before operating instead.
  with pd.option_context('mode.use_inf_as_na', True):
```

```
[8]: <seaborn.axisgrid.JointGrid at 0x1c90c86f790>
```



```
[9]: sns.jointplot(x= 'age' , y= 'fare' , data=dataset)
```

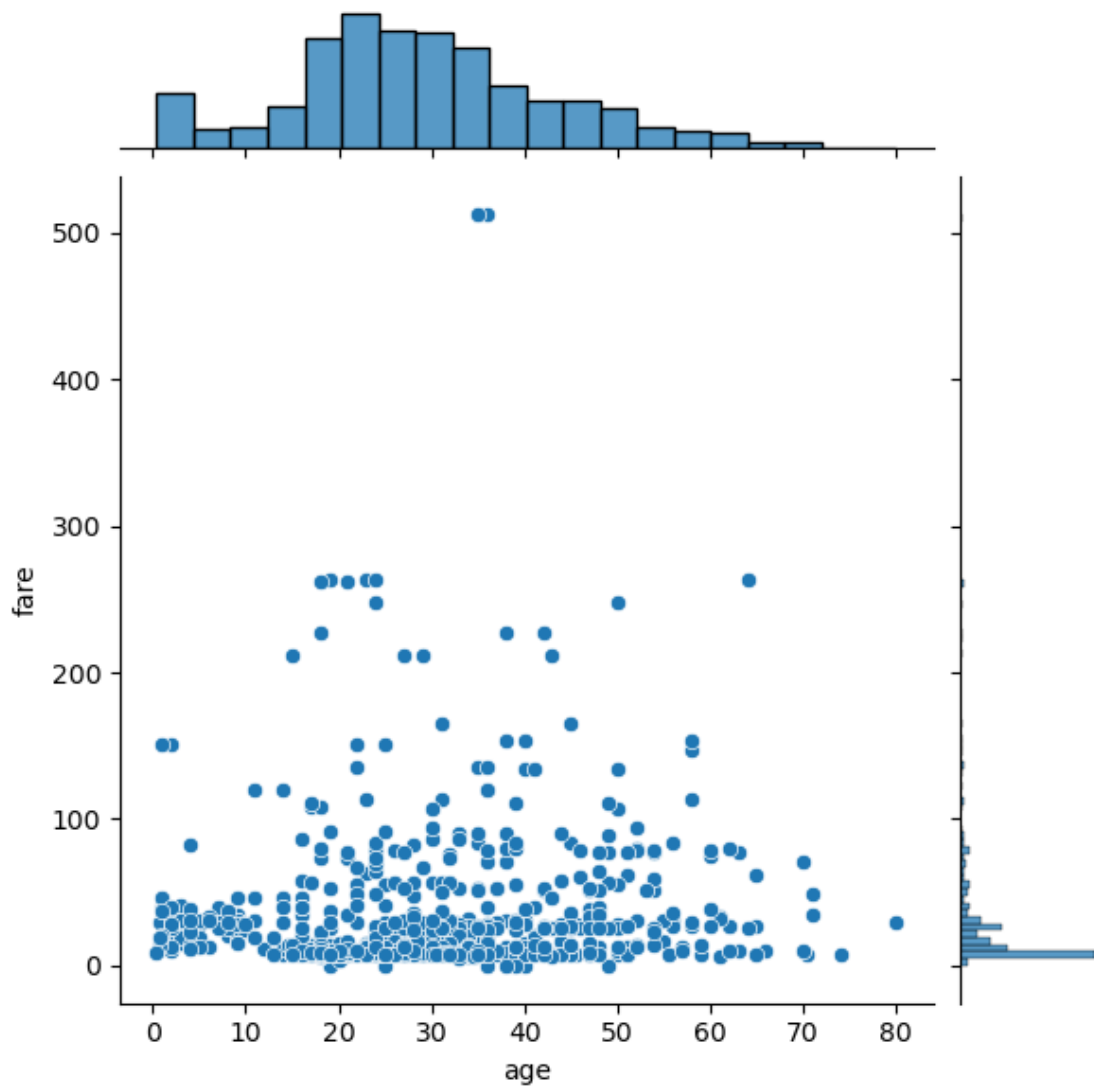
C:\Users\WINDOWS 10\anaconda3\Lib\site-packages\seaborn_oldcore.py:1119:
FutureWarning: use_inf_as_na option is deprecated and will be removed in a
future version. Convert inf values to NaN before operating instead.

```
with pd.option_context('mode.use_inf_as_na', True):
```

C:\Users\WINDOWS 10\anaconda3\Lib\site-packages\seaborn_oldcore.py:1119:
FutureWarning: use_inf_as_na option is deprecated and will be removed in a
future version. Convert inf values to NaN before operating instead.

```
with pd.option_context('mode.use_inf_as_na', True):
```

```
[9]: <seaborn.axisgrid.JointGrid at 0x1c90c84dc50>
```

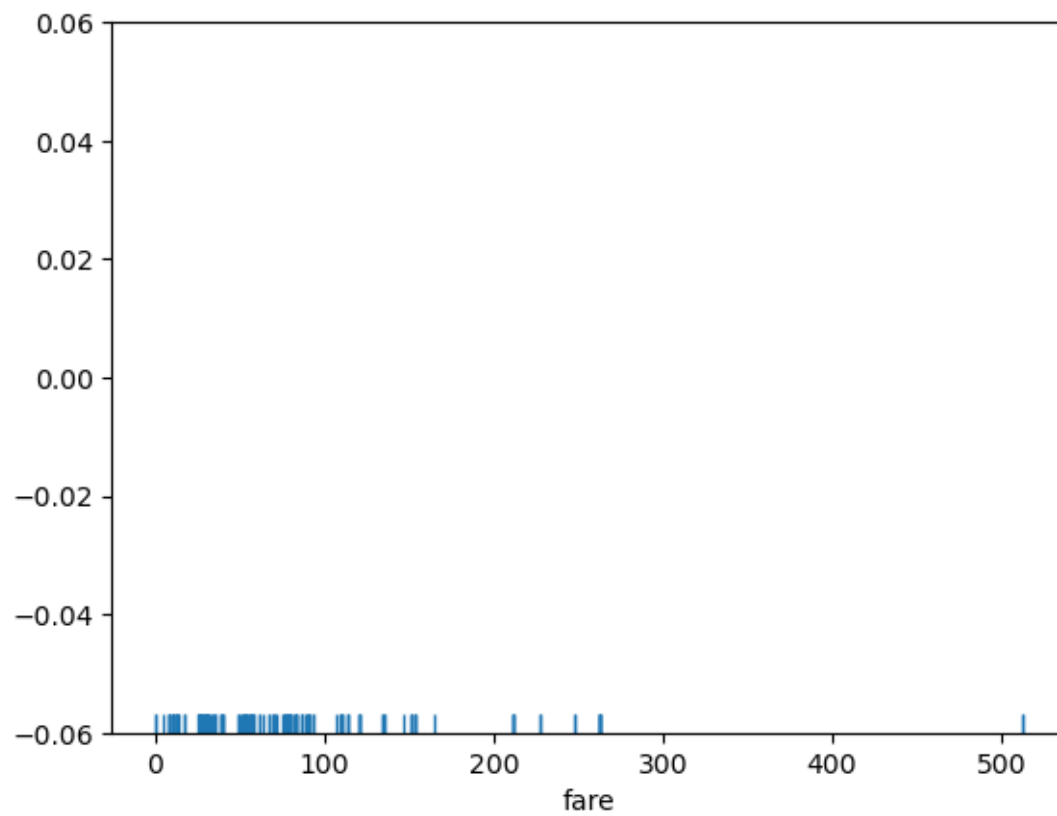


```
[10]: dataset = dataset.dropna()
```

```
[11]: sns.rugplot(dataset[ 'fare' ])
```

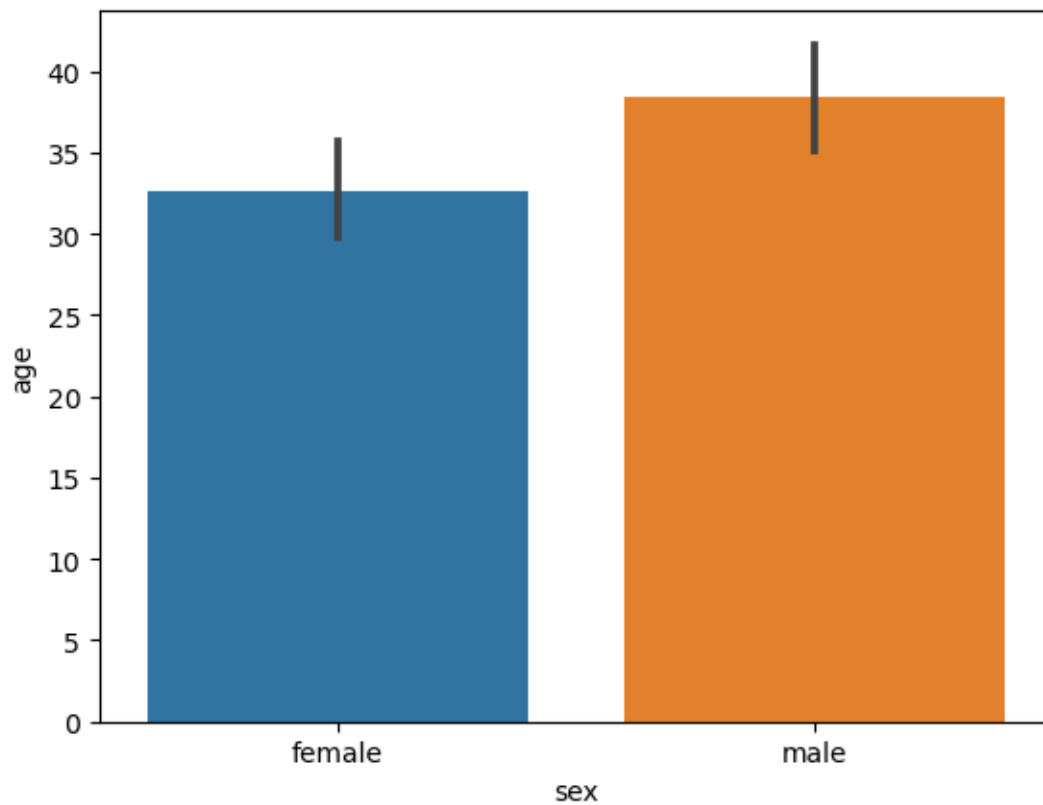
C:\Users\WINDOWS 10\anaconda3\Lib\site-packages\seaborn_oldcore.py:1119:
FutureWarning: use_inf_as_na option is deprecated and will be removed in a
future version. Convert inf values to NaN before operating instead.
with pd.option_context('mode.use_inf_as_na', True):

```
[11]: <Axes: xlabel='fare'>
```



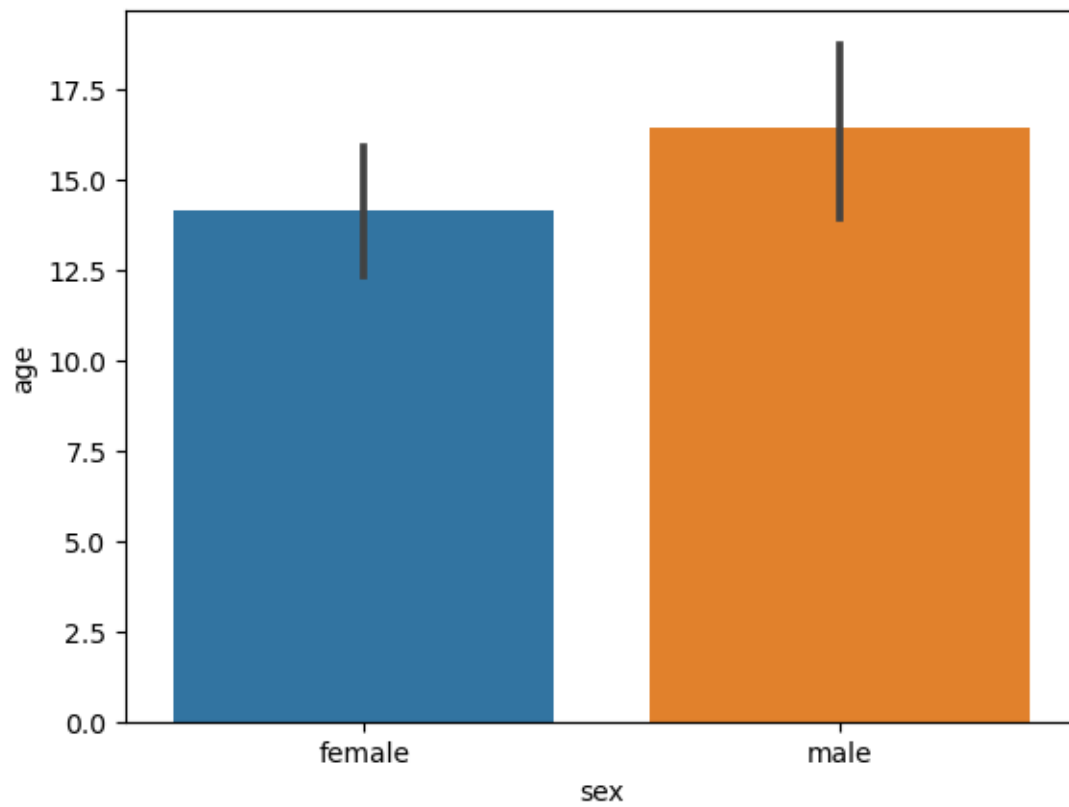
```
[12]: sns.barplot(x= 'sex' , y= 'age' , data=dataset)
```

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

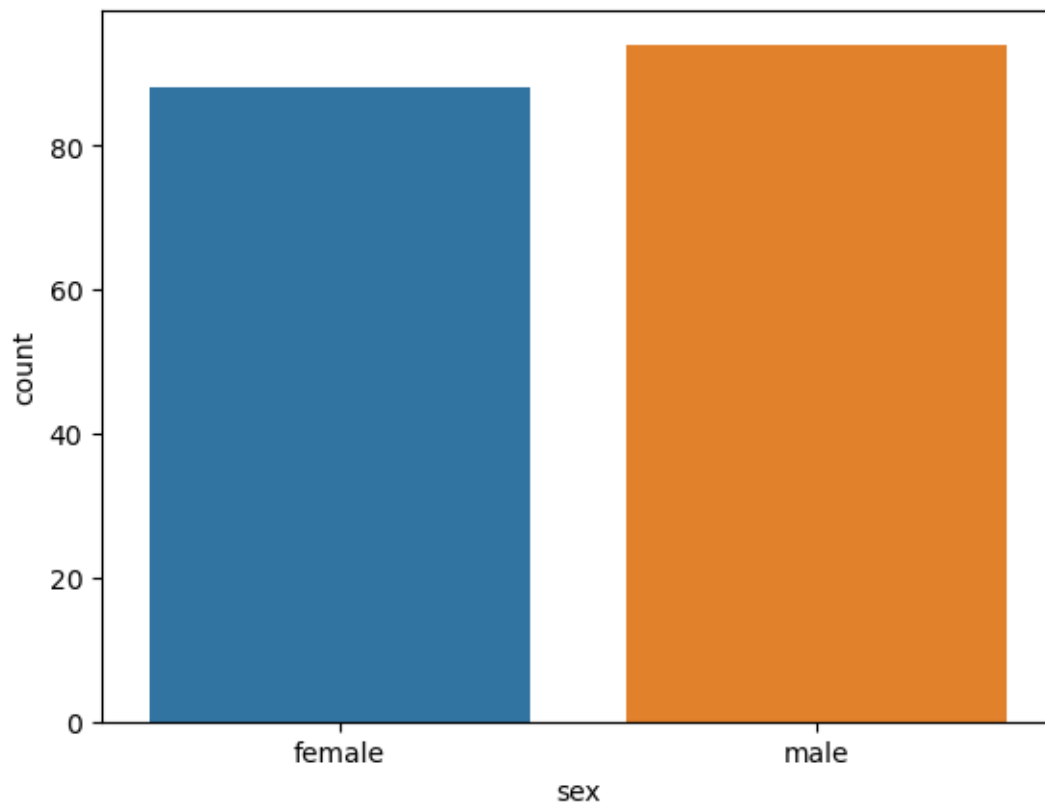
```
[13]: sns.barplot(x= 'sex' , y= 'age' , data=dataset, estimator=np.std)
```

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



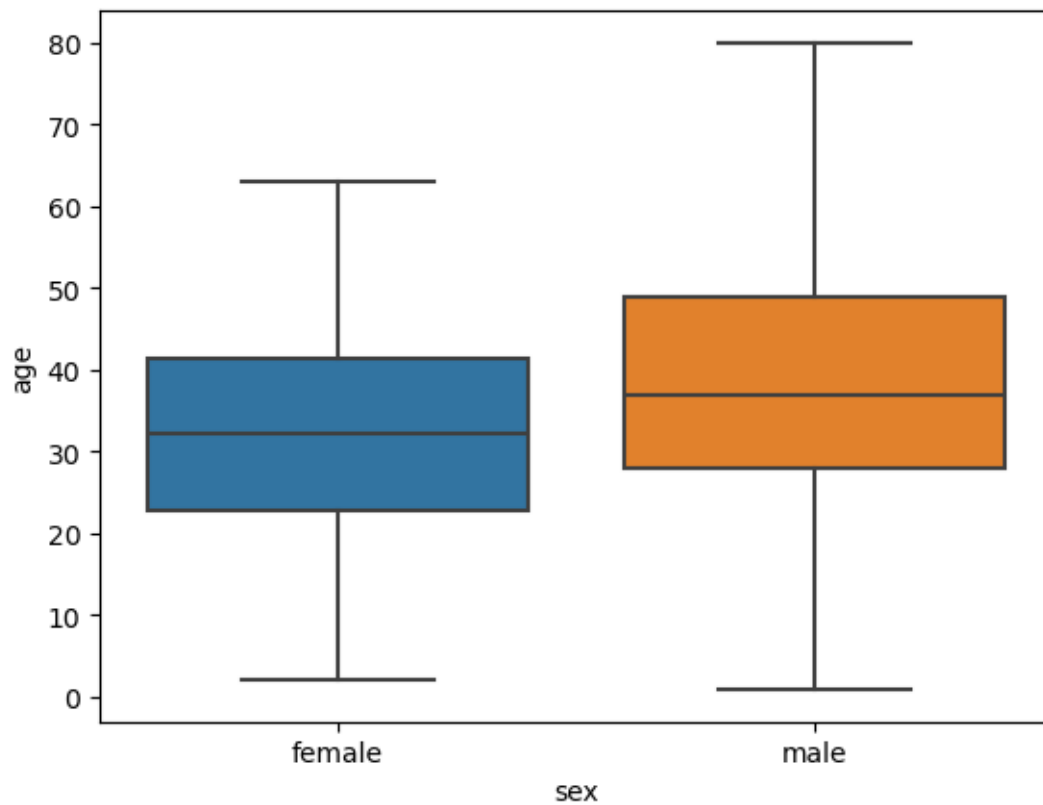
```
[14]: sns.countplot(x= 'sex' , data=dataset)
```

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



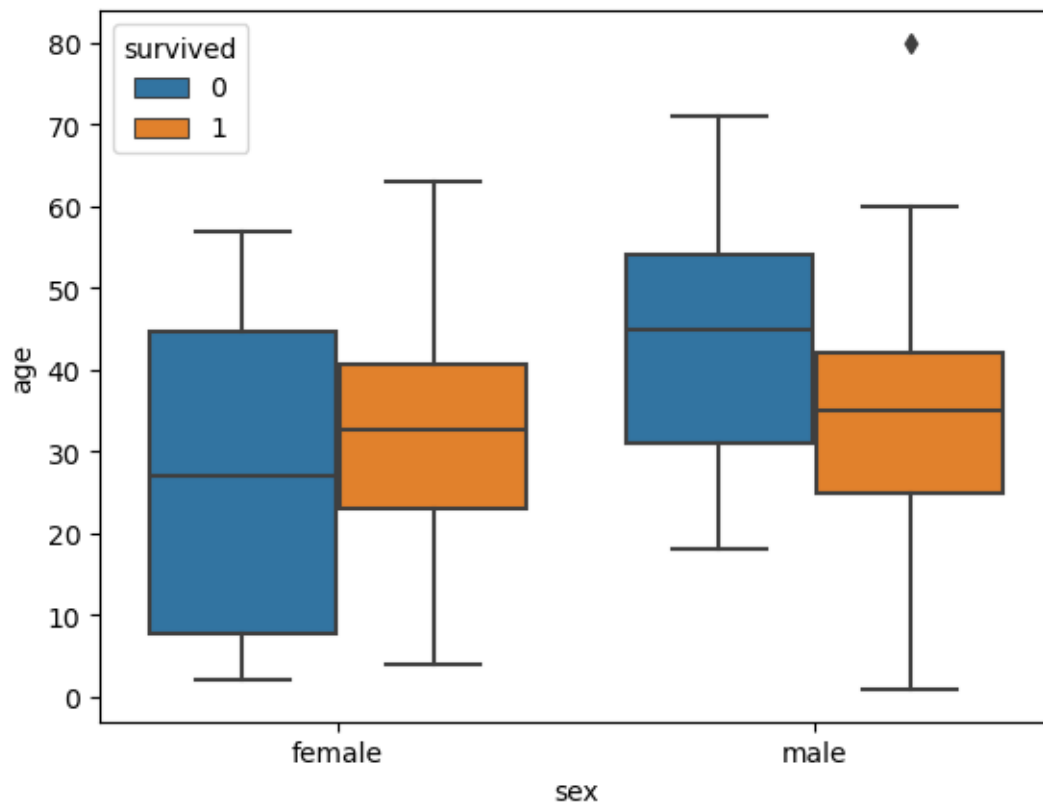
```
[15]: sns.boxplot(x= 'sex' , y= 'age' , data=dataset)
```

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



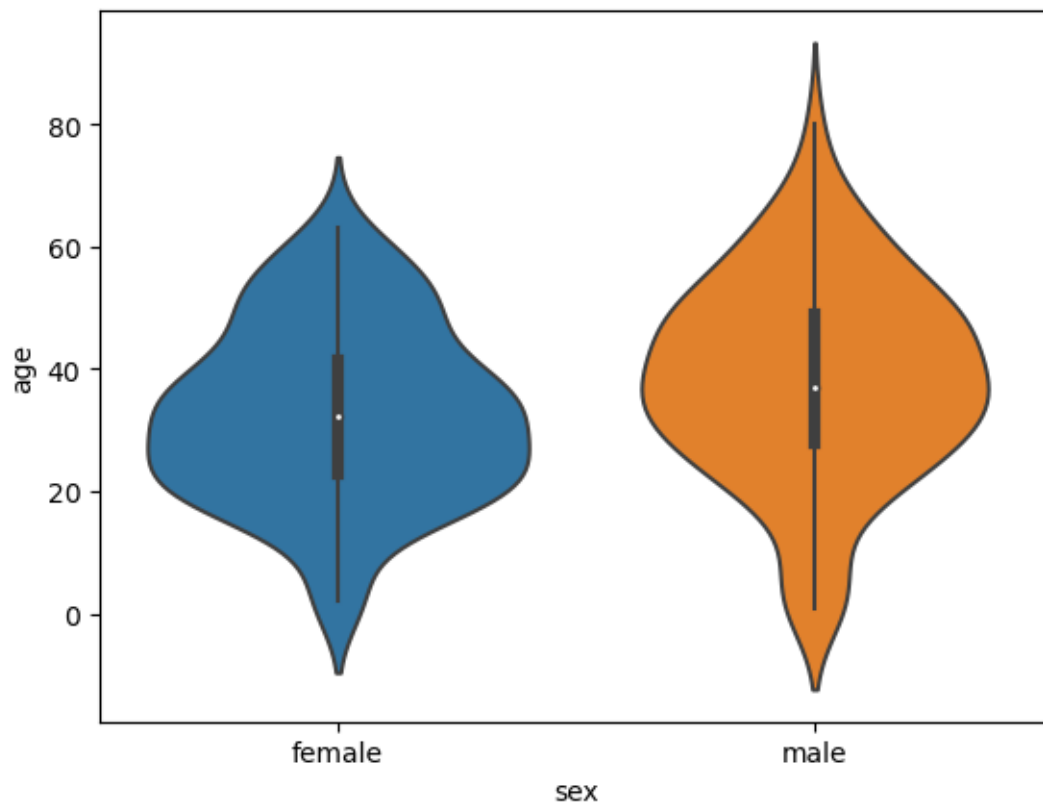
```
[16]: sns.boxplot(x= 'sex' , y= 'age' , data=dataset, hue= "survived" )
```

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



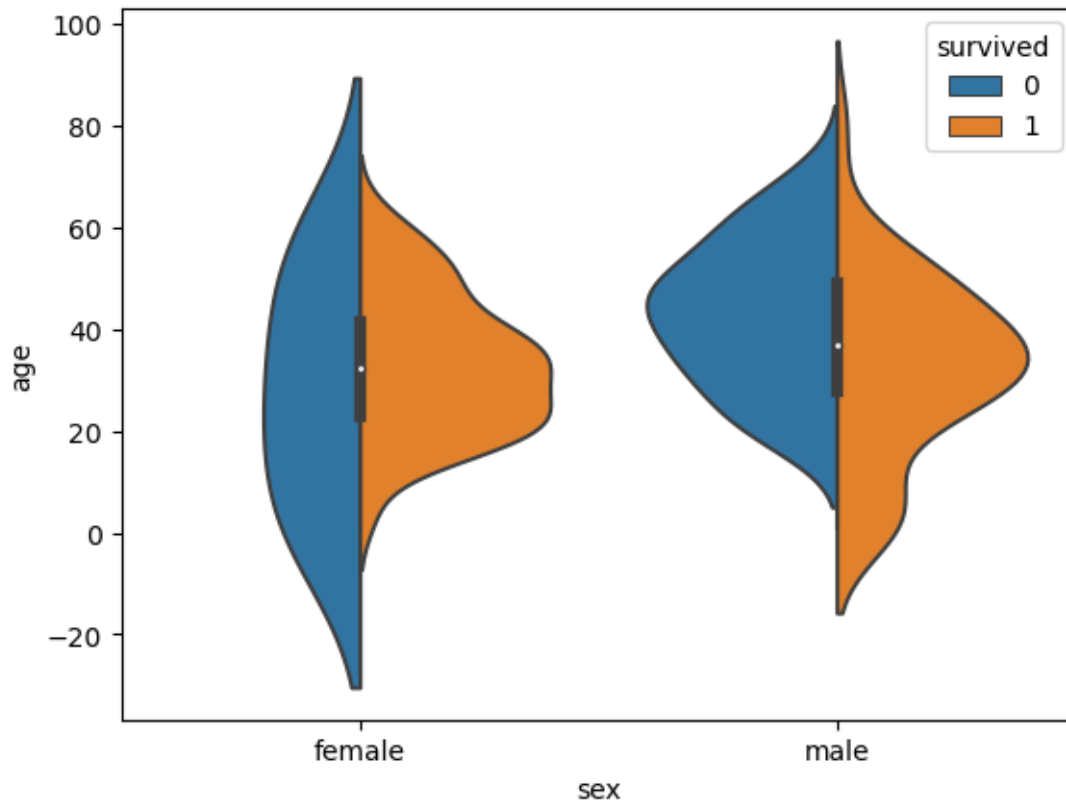
```
[17]: sns.violinplot(x= 'sex' , y= 'age' , data=dataset)
```

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



```
[18]: sns.violinplot(x= 'sex' , y= 'age' , data=dataset, hue= 'survived' , split=True)
```

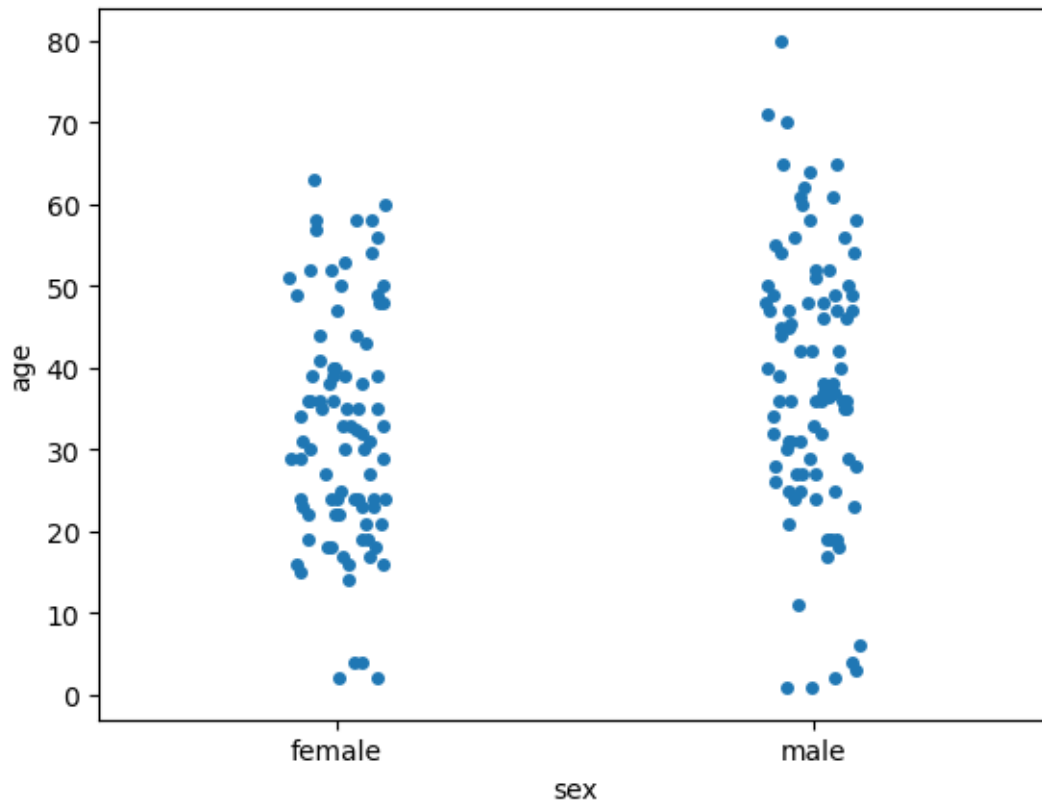
```
[18]: <Axes: xlabel='sex', ylabel='age'>
```



```
[19]: sns.stripplot(x= 'sex' , y= 'age' , data=dataset)
```

```
C:\Users\WINDOWS 10\anaconda3\Lib\site-packages\seaborn\_oldcore.py:1119:
FutureWarning: use_inf_as_na option is deprecated and will be removed in a
future version. Convert inf values to NaN before operating instead.
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C:\Users\WINDOWS 10\anaconda3\Lib\site-packages\seaborn\_oldcore.py:1119:
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future version. Convert inf values to NaN before operating instead.
  with pd.option_context('mode.use_inf_as_na', True):
```

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



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

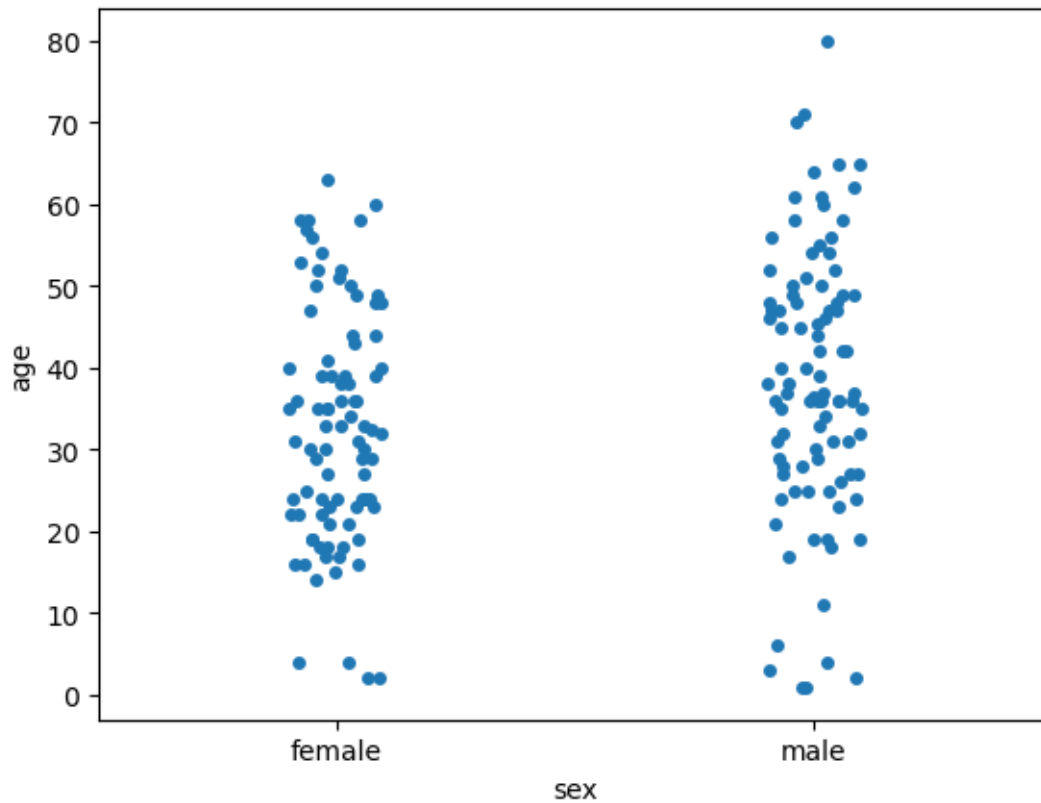
```
C:\Users\WINDOWS 10\anaconda3\Lib\site-packages\seaborn\_oldcore.py:1119:
FutureWarning: use_inf_as_na option is deprecated and will be removed in a
future version. Convert inf values to NaN before operating instead.
```

```
    with pd.option_context('mode.use_inf_as_na', True):
```

```
C:\Users\WINDOWS 10\anaconda3\Lib\site-packages\seaborn\_oldcore.py:1119:
FutureWarning: use_inf_as_na option is deprecated and will be removed in a
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```

```
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```

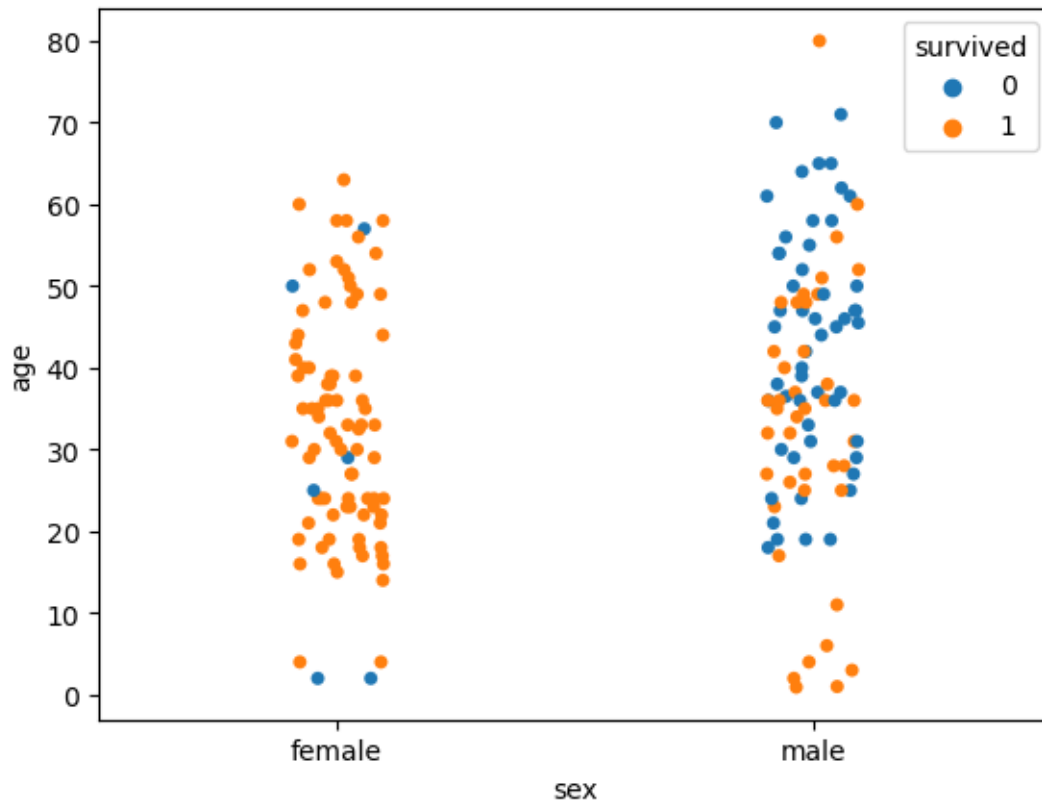
```
[20]: <Axes: xlabel='sex', ylabel='age'>
```

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

```
C:\Users\WINDOWS 10\anaconda3\Lib\site-packages\seaborn\_oldcore.py:1119:
FutureWarning: use_inf_as_na option is deprecated and will be removed in a
future version. Convert inf values to NaN before operating instead.
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C:\Users\WINDOWS 10\anaconda3\Lib\site-packages\seaborn\_oldcore.py:1119:
FutureWarning: use_inf_as_na option is deprecated and will be removed in a
future version. Convert inf values to NaN before operating instead.
  with pd.option_context('mode.use_inf_as_na', True):
```

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



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

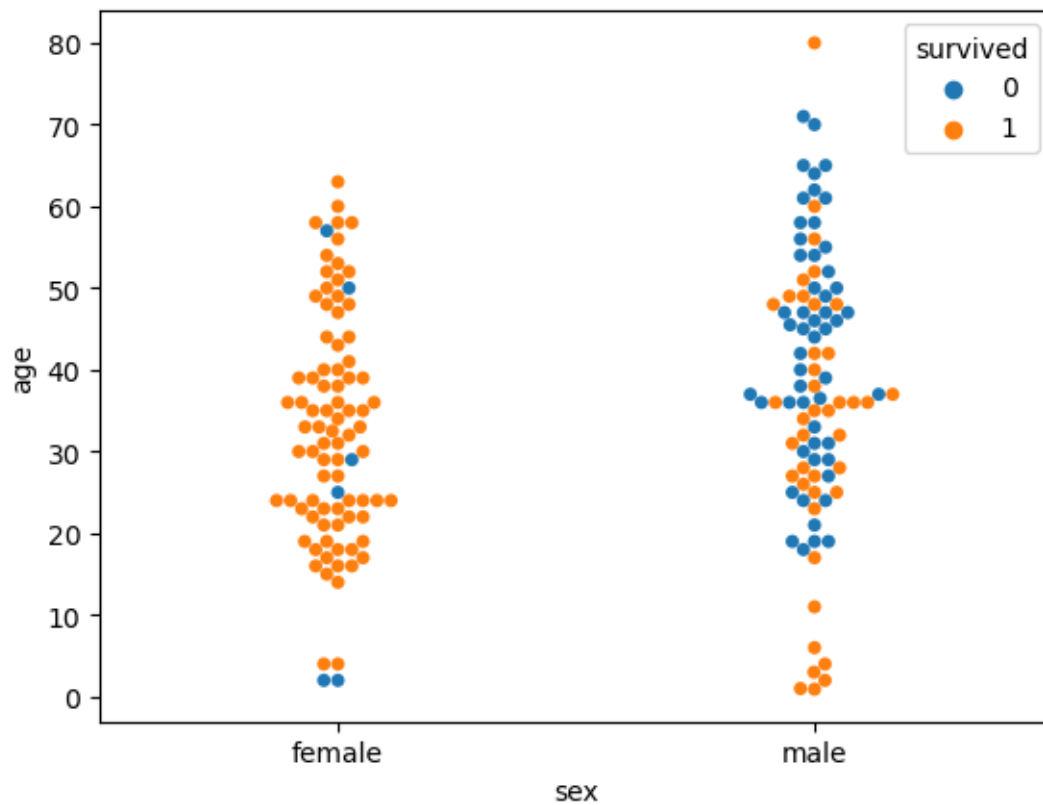
```
C:\Users\WINDOWS 10\anaconda3\Lib\site-packages\seaborn\_oldcore.py:1119:
FutureWarning: use_inf_as_na option is deprecated and will be removed in a
future version. Convert inf values to NaN before operating instead.
```

```
    with pd.option_context('mode.use_inf_as_na', True):
```

```
C:\Users\WINDOWS 10\anaconda3\Lib\site-packages\seaborn\_oldcore.py:1119:
FutureWarning: use_inf_as_na option is deprecated and will be removed in a
future version. Convert inf values to NaN before operating instead.
```

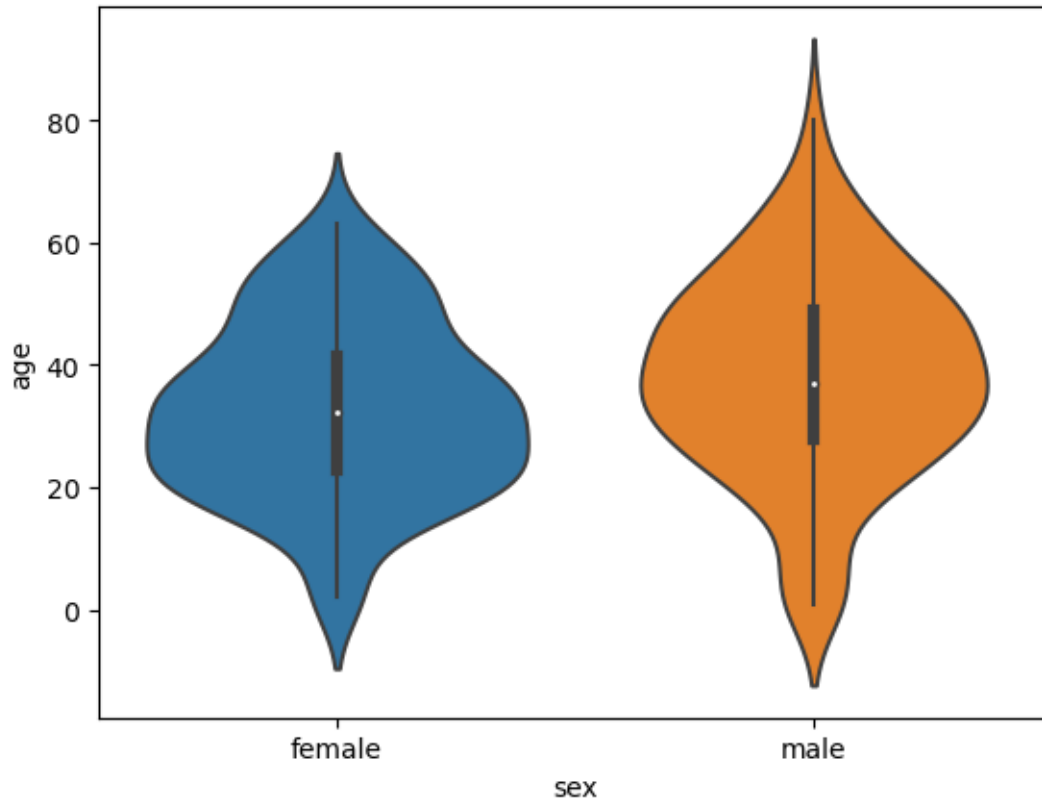
```
    with pd.option_context('mode.use_inf_as_na', True):
```

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



```
[23]: sns.violinplot(x= 'sex' , y= 'age' , data=dataset)
```

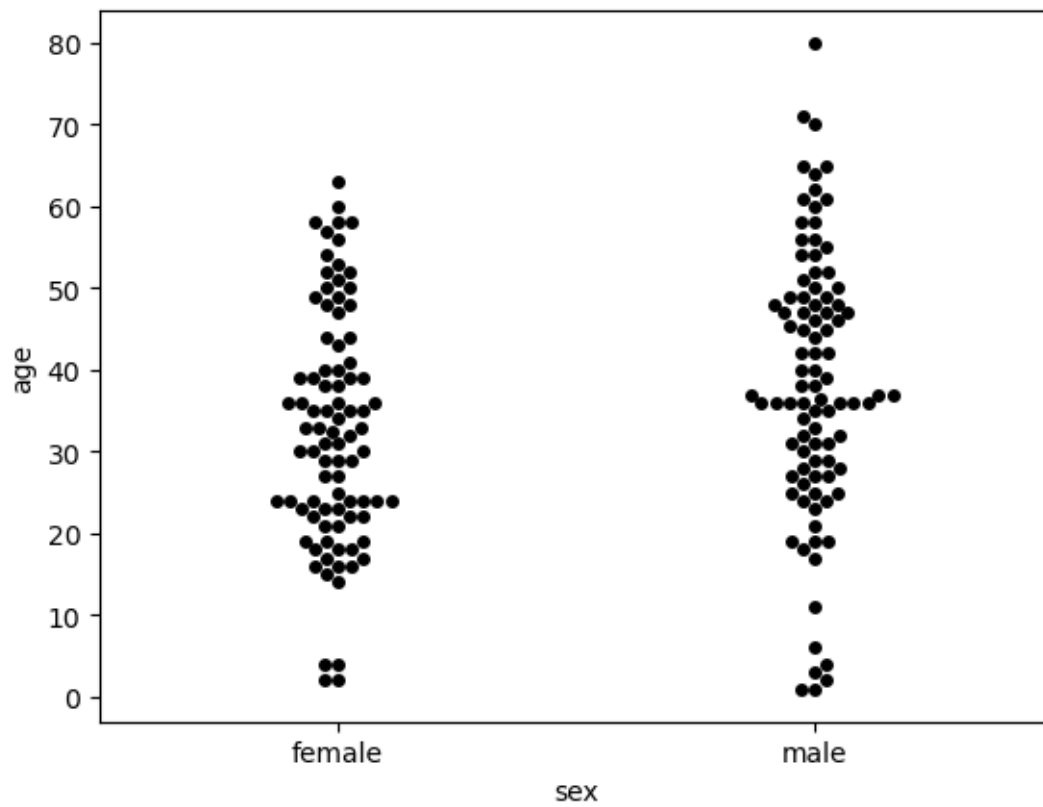
```
[23]: <Axes: xlabel='sex', ylabel='age'>
```



```
[24]: sns.swarmplot(x= 'sex' , y= 'age' , data=dataset, color= 'black' )
```

```
C:\Users\WINDOWS 10\anaconda3\Lib\site-packages\seaborn\_oldcore.py:1119:
FutureWarning: use_inf_as_na option is deprecated and will be removed in a
future version. Convert inf values to NaN before operating instead.
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C:\Users\WINDOWS 10\anaconda3\Lib\site-packages\seaborn\_oldcore.py:1119:
FutureWarning: use_inf_as_na option is deprecated and will be removed in a
future version. Convert inf values to NaN before operating instead.
  with pd.option_context('mode.use_inf_as_na', True):
```

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



[]: