

Write a function that uses `seaborn` to visualize data as we need it! We'll work on the penguins dataset and plot the numeric variables *except for* body mass.

```
In [1]: import seaborn as sns
penguins = sns.load_dataset("penguins")
```

```
In [2]: penguins
```

```
Out[2]:
```

	species	island	bill_length_mm	bill_depth_mm	flipper_length_mm	body_mass_g
0	Adelie	Torgersen	39.1	18.7	181.0	3
1	Adelie	Torgersen	39.5	17.4	186.0	3
2	Adelie	Torgersen	40.3	18.0	195.0	3
3	Adelie	Torgersen	NaN	NaN	NaN	
4	Adelie	Torgersen	36.7	19.3	193.0	3
...	
339	Gentoo	Biscoe	NaN	NaN	NaN	
340	Gentoo	Biscoe	46.8	14.3	215.0	4
341	Gentoo	Biscoe	50.4	15.7	222.0	5
342	Gentoo	Biscoe	45.2	14.8	212.0	5
343	Gentoo	Biscoe	49.9	16.1	213.0	5

344 rows × 7 columns

To flex both our plotting and function writing muscles, let's write a function to do some plotting! Your function should:

- take as input the penguins data frame
- allow the user to choose between a strip, violin, or box plot
- set one of the above three be the default
- have a docstr so users can get `help()` on it
- produce the plot requested by the user (of course!)
- provide a meaningful help

Write function

```
In [40]: def foo(type="strip", xval="species", yval="bill_length_mm") :
        """
        select from the desired values, enter them as strings
        type= strip, violin, box
        xval= species, island, and sex
        yval= bill_length_mm, bill_depth_mm, flipper_length_mm, body_mass_g
        """
```

```
fig = sns.catplot(
    data=penguins, kind=type,
    x=xval, y=yval
)
fig.set_axis_labels(xval, yval, labelpad=10)
fig.figure.set_size_inches(6.5, 4.5)
fig.ax.margins(.15)
```

Get help on function

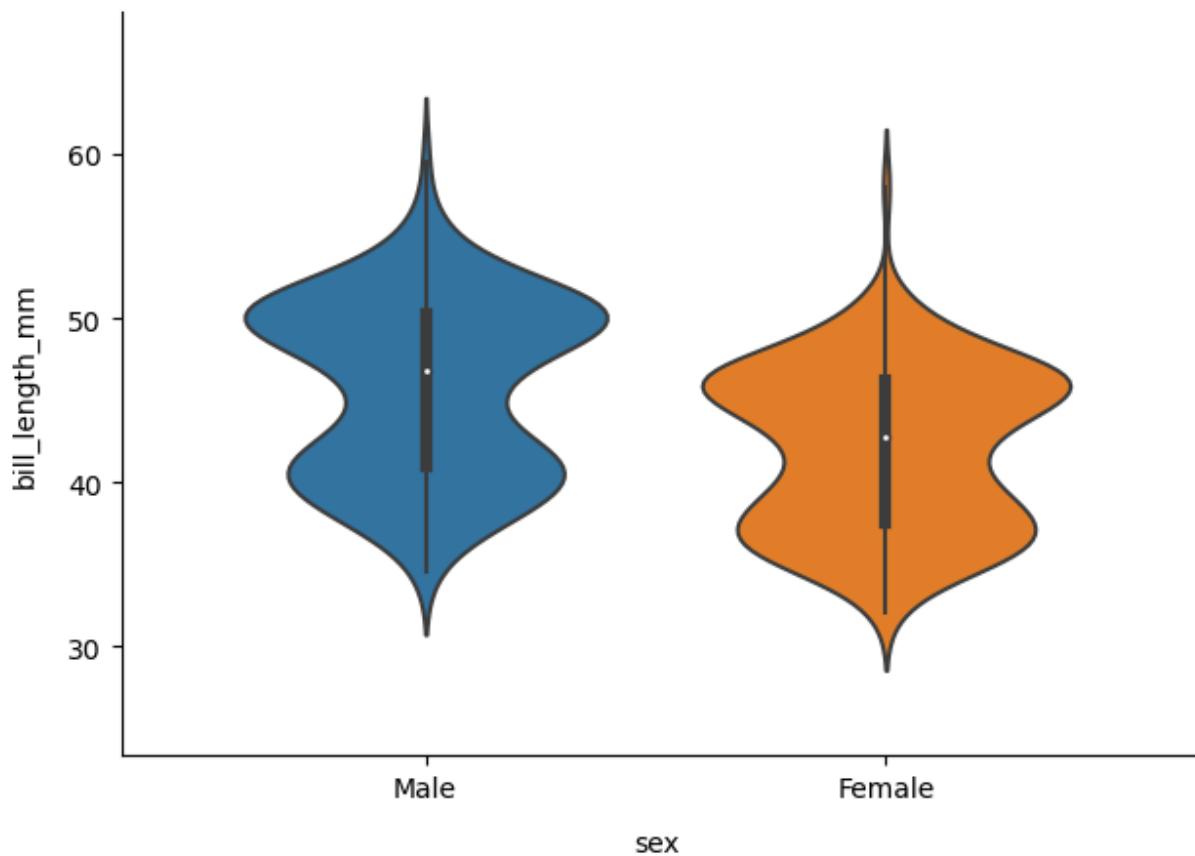
In [41]: `help(foo)`

Help on function foo in module __main__:

```
foo(type='strip', xval='species', yval='bill_length_mm')
    select from the desired values, enter them as strings
    type= strip, violin, box
    xval= species, island, and sex
    yval= bill_length_mm, bill_depth_mm, flipper_length_mm, body_mass_g
```

run function

In [42]: `vplot = foo(type="violin", xval="sex")`
`vplot`



In []: