

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")

# dropped the body mass column
penguins = penguins.drop("body_mass_g", axis = 1)
```

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 [14]: def plot_data(user_data):
    """
    1. Box plot gives a quick visual summary of the variability
       of the values in a box form.

    2. Strip plot does similar things as box plot, except it
       appears in dots and values are along one unique axis.

    3. Violin plot is similar to box plot, except it compares
       the groups in difference sizes.
    """
    # user chooses a plot type
    plot_choice = input("Enter 'default' if you want the default violin plot")

    # plotting the data
    if plot_choice == "default":
        sns.catplot(data = user_data, kind = "violin")
    elif plot_choice == "strip":
        sns.catplot(data = user_data)
    elif plot_choice == "box":
        sns.catplot(data = user_data, kind = "box")
```

Get help on function

```
In [9]: help(plot_data)
```

Help on function plot_data in module __main__:

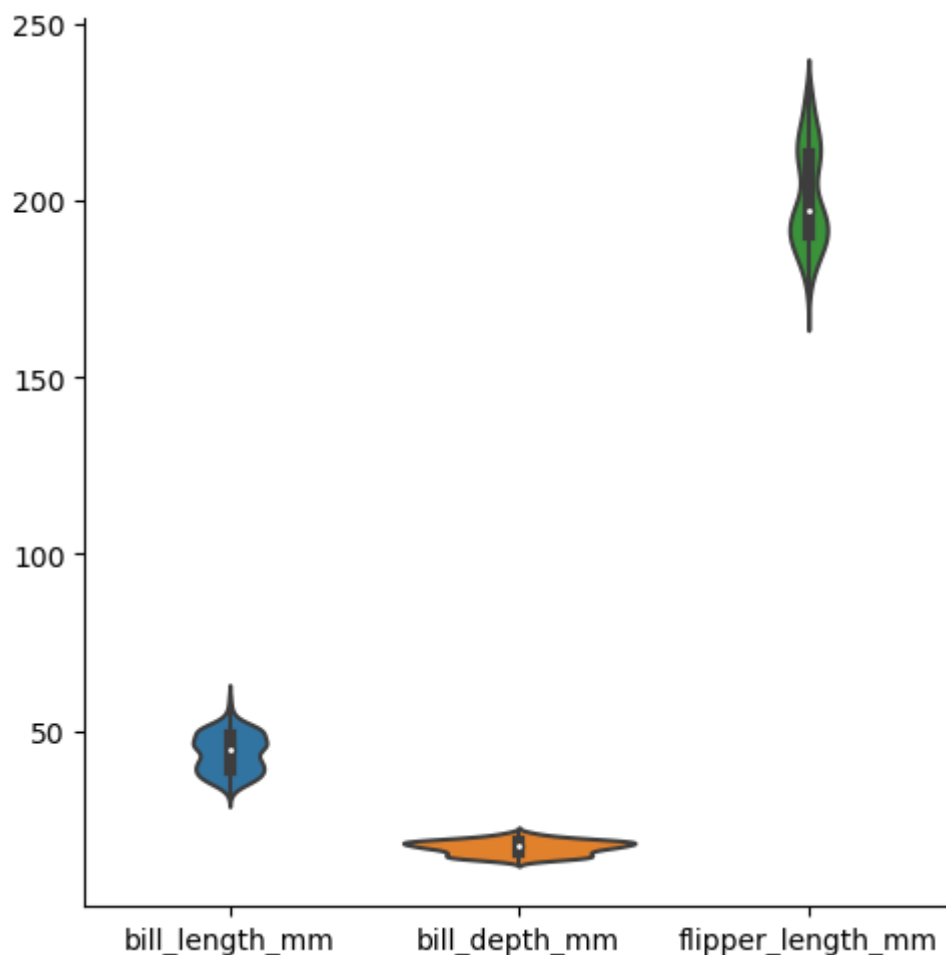
plot_data(user_data)

1. Box plot gives a quick visual summary of the variability of the values in a box form.
2. Strip plot does similar things as box plot, except it appears in dots and values are along one unique axis.
3. Violin plot is similar to box plot, except it compares the groups in difference sizes.

run function

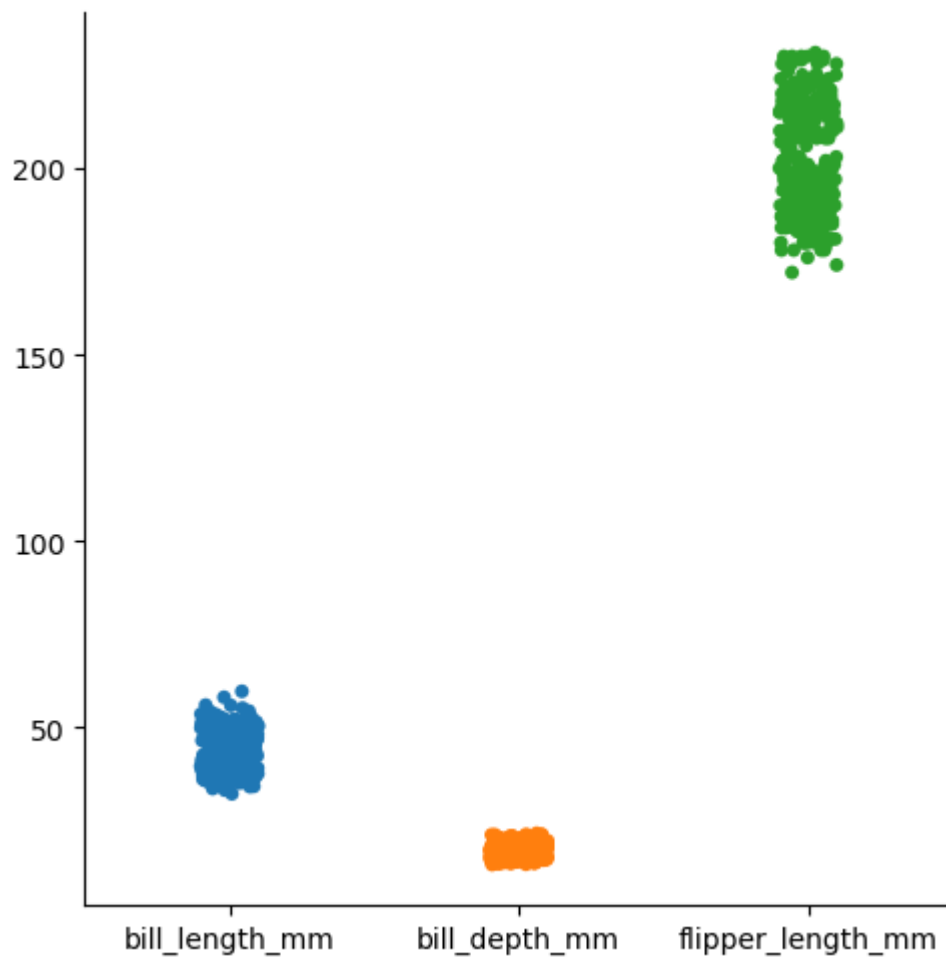
```
In [10]: plot_data(penguins)
```

```
/Users/phoebewang/anaconda3/lib/python3.11/site-packages/seaborn/axisgrid.py:118: UserWarning: The figure layout has changed to tight
self._figure.tight_layout(*args, **kwargs)
```



```
In [11]: plot_data(penguins)
```

```
/Users/phoebewang/anaconda3/lib/python3.11/site-packages/seaborn/axisgrid.py:118: UserWarning: The figure layout has changed to tight
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```



```
In [12]: plot_data(penguins)
```

```
/Users/phoebewang/anaconda3/lib/python3.11/site-packages/seaborn/axisgrid.py:118: UserWarning: The figure layout has changed to tight
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