

You are reading documentation for the unreleased version of Matplotlib. Try searching for the released version of this page instead?



Fork me on GitHub

Version 2.1.1.post1118+gf867e21

[home](#) | [examples](#) | [tutorials](#) | [pyplot](#) | [docs](#) »

[modules](#) | [index](#)

Plotting categorical variables

How to use categorical variables in Matplotlib.

Many times you want to create a plot that uses categorical variables in Matplotlib. Matplotlib allows you to pass categorical variables directly to many plotting functions, which we demonstrate below.

```
import matplotlib.pyplot as plt

data = {'apples': 10, 'oranges': 15, 'lemons': 5, 'limes': 20}
names = list(data.keys())
values = list(data.values())

fig, axs = plt.subplots(1, 3, figsize=(9, 3), sharey=True)
axs[0].bar(names, values)
axs[1].scatter(names, values)
axs[2].plot(names, values)
fig.suptitle('Categorical Plotting')
```

Related Topics

[Documentation overview](#)

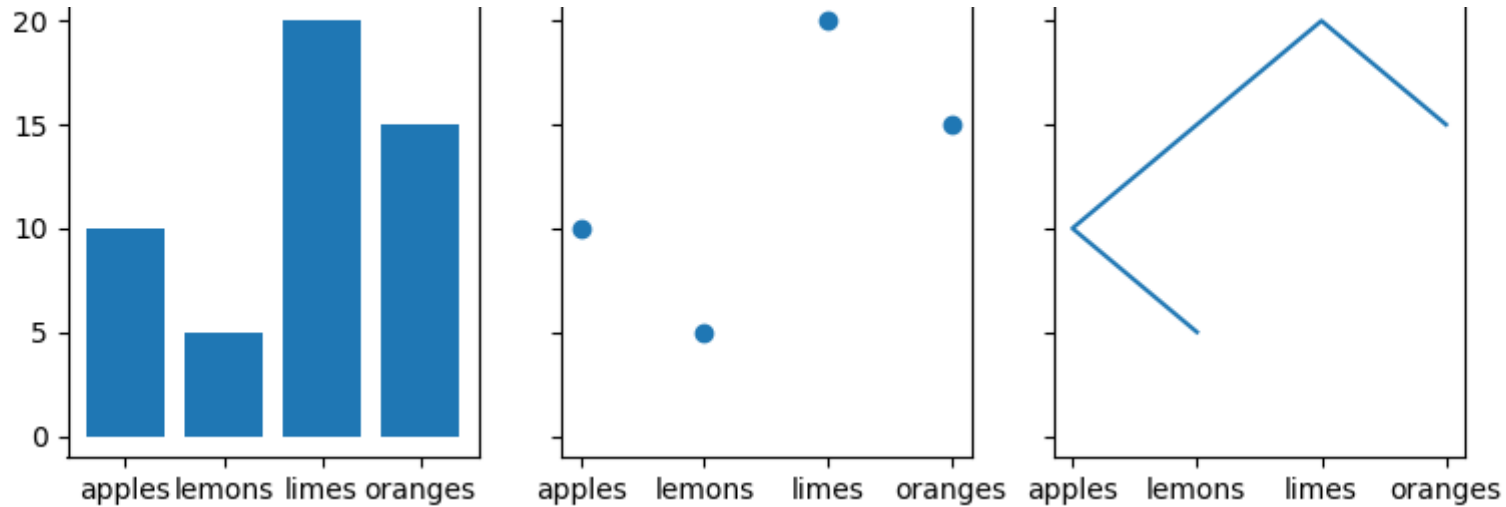
This Page

[Show Source](#)

Quick search

Go

You are reading documentation for the unreleased version of Matplotlib. Try searching for the released version of this page instead?



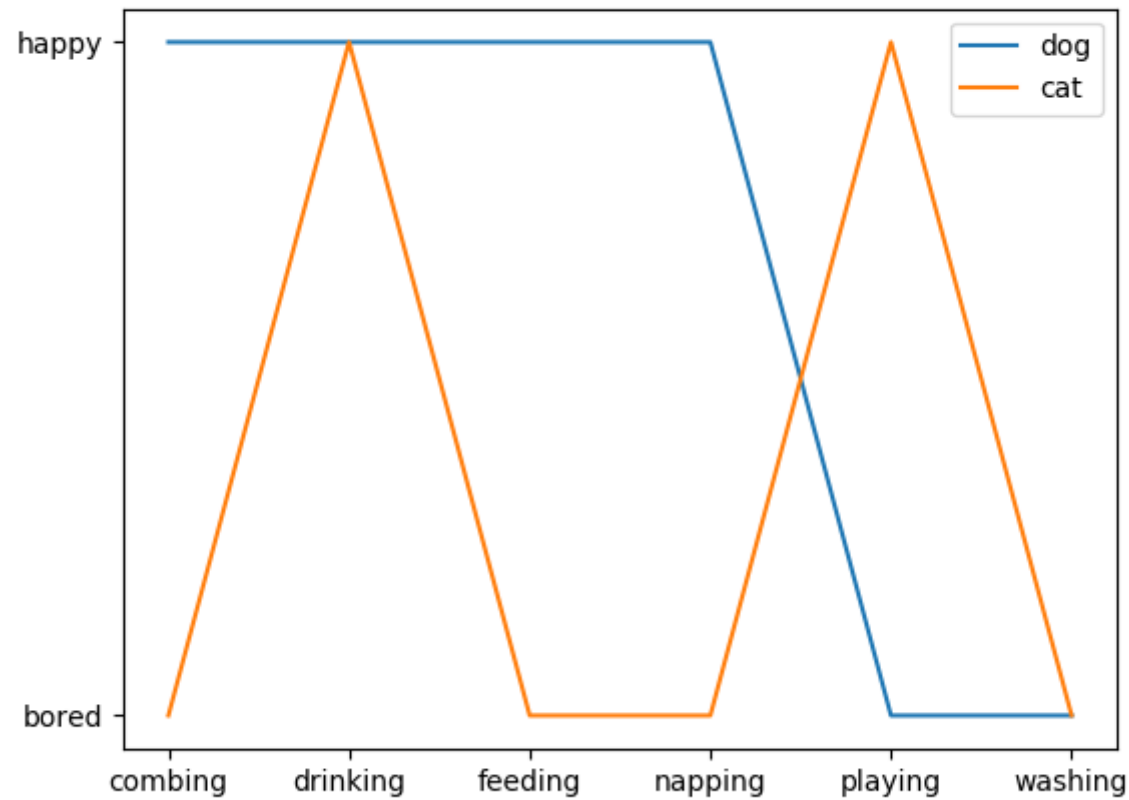
This works on both axes:

```
cat = ["bored", "happy", "bored", "bored", "happy", "bored"]
dog = ["happy", "happy", "happy", "happy", "bored", "bored"]
activity = ["combing", "drinking", "feeding", "napping", "playing", "washing"]

fig, ax = plt.subplots()
ax.plot(activity, dog, label="dog")
ax.plot(activity, cat, label="cat")
ax.legend()

plt.show()
```

You are reading documentation for the unreleased version of Matplotlib. Try searching for the released version of this page instead?



Download Python source code:
[categorical_variables.py](#)

Download Jupyter notebook:
[categorical_variables.ipynb](#)