

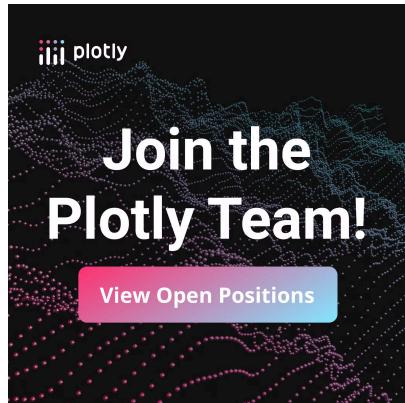
plotly | Graphing Libraries ([https://plotly.com/\)\(/graphing-libraries/](https://plotly.com/)(/graphing-libraries/))
(utm_content=sidebar)

Python [Suggest](#) [binder](#) ([https://mybinder.org/v2/gh/plotly/plotly.py/doc-](https://mybinder.org/v2/gh/plotly/plotly.py/doc-prod?filepath=https://github.com/plotly/plotly.py/edit/doc-)
(/python) > fileedit=https://github.com/plotly/plotly.py/edit/doc-
Getting Started to this [prod/doc/python/getting-started.md](#)
with Plotly page

Getting Started with Plotly in Python

Getting Started with Plotly for Python.

New to Plotly?



Overview

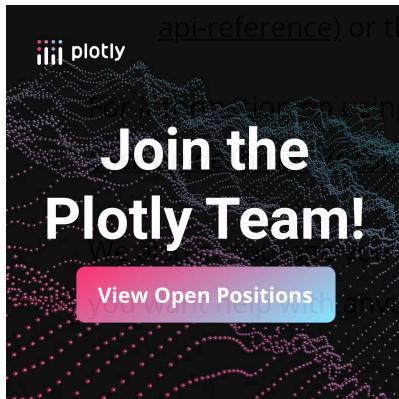
The [plotly Python library](#) (/python/) is an interactive, [open-source](#) (/python/is-plotly-free) plotting library that supports over 40 unique chart types covering a wide range of statistical, financial, geographic, scientific, and 3-dimensional use-cases.

Built on top of the Plotly JavaScript library ([plotly.js](#) (<https://plotly.com/javascript/>)), plotly enables Python users to create beautiful interactive web-based visualizations that can be displayed in Jupyter notebooks, saved to standalone HTML files, or served as part of pure Python-built web applications using Dash. The plotly Python library is sometimes referred to as "plotly.py" to differentiate it from the JavaScript library.

Thanks to deep integration with our [Kaleido](#) (<https://medium.com/plotly/introducing-kaleido-b03c4b7b1d81>) image export utility, plotly also provides great support for non-web contexts including desktop editors (e.g. QtConsole, Spyder, PyCharm) and static document publishing (e.g. exporting notebooks to PDF with high-quality vector images).

This Getting Started guide explains how to install plotly and related optional packages. Once you've installed, you can use our documentation in three main ways:

1. You jump right in to **examples** of how to make [basic charts](#) (/python/basic-charts/), [statistical charts](#) (/python/statistical-charts/), [scientific charts](#) (/python/scientific-charts/), [financial charts](#) (/python/financial-charts/), [maps](#) (/python/maps/), and [3-dimensional charts](#) (/python/3d-charts/).
2. If you prefer to learn about the **fundamentals** of the library first, you can read about [the structure of figures](#) (/python/figure-structure/), [how to create and update figures](#) (/python/creating-and-updating-figures/), [how to display figures](#) (/python/renderers/), [how to theme figures with templates](#) (/python/templates/), [how to export figures to various formats](#) (/python/static-image-export/) and about [Plotly Express](#), the high-level API (/python/plotly-express/) for doing all of the above.
3. You can check out our exhaustive **reference** guides: the [Python API reference](#) (/python-api-reference) or the [Figure Reference](#) (/python/reference)



Installation

plotly may be installed using pip:

```
$ pip install plotly==5.21.0
```

or conda:

```
$ conda install -c plotly plotly=5.21.0
```

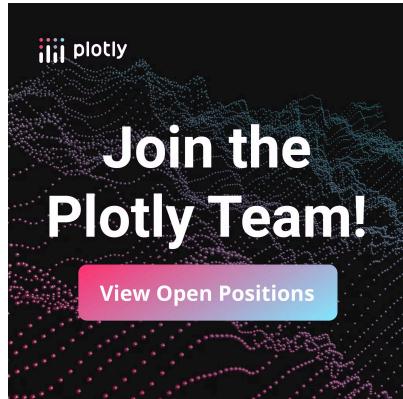
This package contains everything you need to write figures to standalone HTML files.

Note: **No internet connection, account, or payment is required to use `plotly.py`.**

Prior to version 4, this library could operate in either an "online" or "offline" mode.

The documentation tended to emphasize the online mode, where graphs get published to the Chart Studio web service. In version 4, all "online" functionality was removed from the plotly package and is now available as the separate, optional, chart-studio package (See below). **`plotly.py` version 4 is "offline" only, and does not include any functionality for uploading figures or data to cloud services.**

```
import plotly.express as px
fig = px.bar(x=["a", "b", "c"], y=[1, 3, 2])
fig.write_html('first_figure.html', auto_open=True)
```

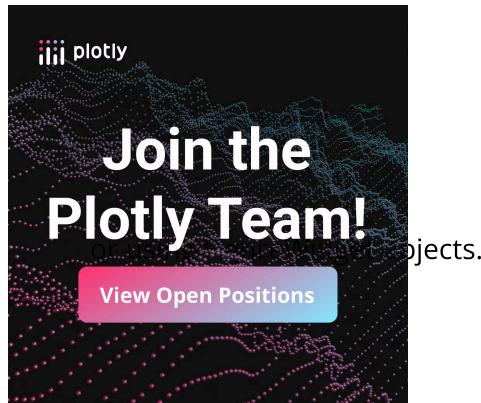
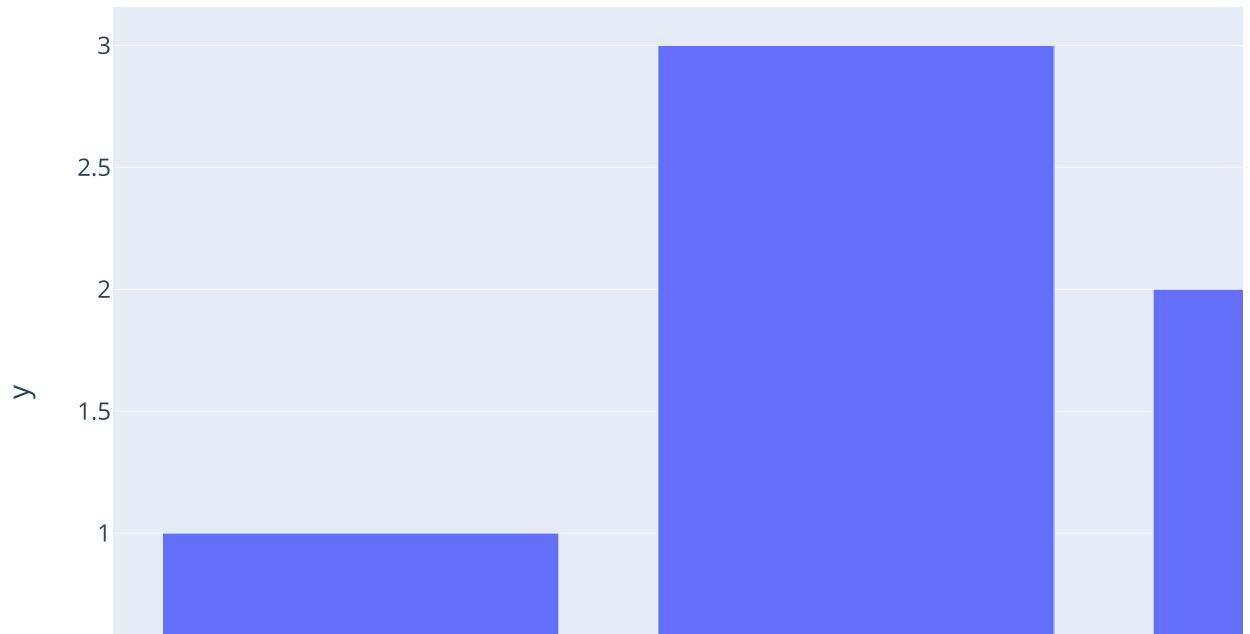


These packages contain everything you need to run JupyterLab...

```
$ jupyter lab
```

and display plotly figures inline using the `plotly_mimetype` renderer...

```
import plotly.express as px
fig = px.bar(x=["a", "b", "c"], y=[1, 3, 2])
fig.show()
```



```
import plotly.express as px
fig = px.bar(x=["a", "b", "c"], y=[1, 3, 2])

import plotly.graph_objects as go
fig_widget = go.FigureWidget(fig)
fig_widget
```

The instructions above apply to JupyterLab 3.x. **For JupyterLab 2 or earlier**, run the following commands to install the required JupyterLab extensions (note that this will require [node](https://nodejs.org/) (<https://nodejs.org/>) to be installed):

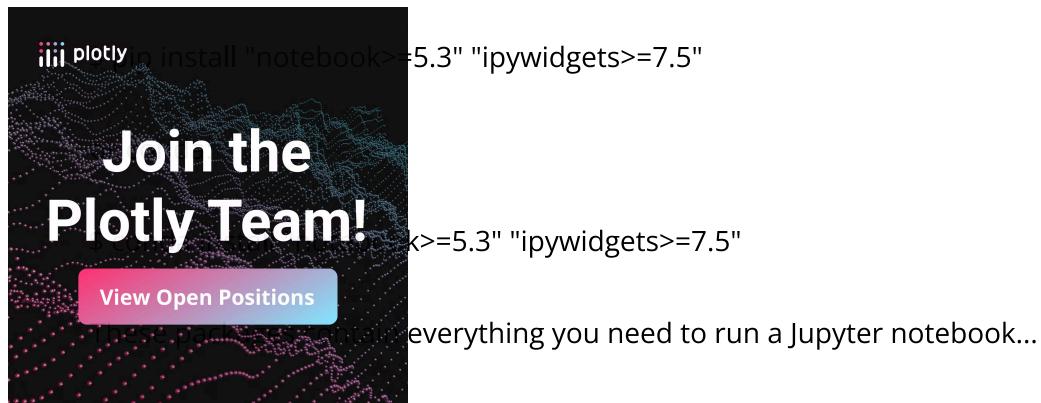
```
# JupyterLab 2.x renderer support jupyter labextension install jupyterlab-plotly@5.21.0 @jupyter-widgets/jupyterlab-manager
```

Please check out our [Troubleshooting guide](#) ([/python/troubleshooting/](#)) if you run into any problems with JupyterLab, particularly if you are using multiple python environments inside Jupyter.

See [Displaying Figures in Python](#) ([/python/renderers/](#)) for more information on the renderers framework, and see [Plotly FigureWidget Overview](#) ([/python/figurewidget/](#)) for more information on using FigureWidget.

Jupyter Notebook Support

For use in the classic [Jupyter Notebook](#) (<https://jupyter.org/>), install the notebook and ipywidgets packages using pip:



```
$ jupyter notebook
```

and display plotly figures inline using the notebook renderer...

```
import plotly.express as px
fig = px.bar(x=["a", "b", "c"], y=[1, 3, 2])
fig.show()
```

