

MATPLOTTING

Creating plot

```
plot(x,y)
```

```
scatter(x,y)
```

```
bar(x,y)
```

The above ones are just x axis things and y axis things

```
plt.hist(data, bins)
```

data: array of values to be histogrammed

bins: number of bins or bin edges

```
plt.pie(sizes, labels=labels)
```

Customise plot

#This is done for the returned thing from function

```
line.set_color('red')
```

```
line.set_linestyle('--')
```

```
line.set_marker('o')
```

```
line.set_linewidth(2)
```

```
line.set_label("My Line")
```

```
line.set_alpha(0.7)
```

```
line.set_markerfacecolor('blue')
```

plt.xlabel() and plt.ylabel() to do things ig

```
plt.title("Example Plot")
```

```
plt.grid(True)
```

```
plt.legend(loc='upper right', fontsize='small', title="Legend")
```

Save plot

plt.show() stop running to display

```
plt.savefig("plot.png", dpi=300, transparent=True, bbox_inches='tight')
```

Subplotting:-

```
fig, axs = plt.subplots(1, 2)
```

Axs is an array of the subplots

And fig is the general thing. it's the overall container that holds everything: subplots, titles, legends, axes, etc.

Think of it like the canvas.

You can use it to:

Set the **entire figure's title**: `fig.suptitle("Overall Title")`

Save the whole figure: `fig.savefig("figure.png")`

Adjust layout and spacing: `fig.tight_layout(), fig.subplots_adjust()`