

# Line Charts: Takeaways

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## Syntax

- Importing the pyplot module:

```
import matplotlib.pyplot as plt
```

- Displaying the plot in a Jupyter Notebook cell:

```
%matplotlib inline
```

- Generating and displaying the plot:

```
plt.plot()  
plt.show()
```

- Generating a line chart:

```
plt.plot(first_twelve['DATE'], first_twelve['VALUE'])
```

- To rotate axis ticks:

```
plt.xticks(rotation=90)
```

- To add axis labels:

```
plt.xlabel('Month')  
plt.ylabel('Unemployment Rate')
```

- To add a plot label:

```
plt.title('Monthly Unemployment Trends, 1948')
```

## Concepts

- To create line charts, we use the [matplotlib](#) library, which allows us to: quickly create common plots using high-level functions, extensively tweak plots, and create new kinds of plots from the ground up.
- By default, matplotlib displays a coordinate grid with: the x-axis and y-axis values ranging from -0.6 to 0.6, no grid lines, and no data.
- Visual representations use visual objects like dots, shapes, and lines on a grid.
- Plots are a category of visual representation that allows us to easily understand the representation between variables.

## Resources

- [Documentation for pyplot](#)
- [Types of plots](#)