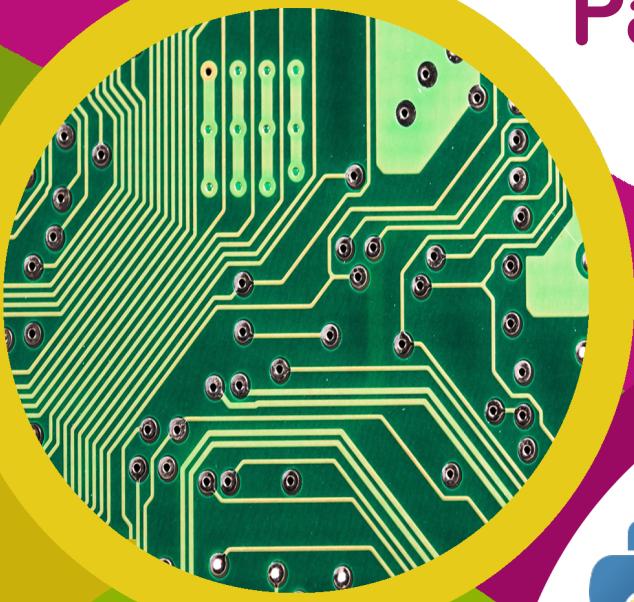


# technocamps

## Pandas & MatPlotLib Lab Tasks



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# Lab Tasks

## Tasks

- 1. Find a new Data Set that interests you.**

You can use Google to search for interesting data sets, or one of the websites we have used.

- 2. Import the Data Set.**

Depemding on what data you have found, you may use any method to import it (i.e. save the file and add it to the project, pull the file from the download link, or scrape a HTML table).

- 3. Get the column labels and size of the data set.**

Print out the labels and length to get an idea of the data structure.

- 4. Filter the data.**

Create a new DataFrame with a slice of your data, what data are you interested in keeping? You can choose to dump columns, rows or both. If you have dumped rows, consider reindexing the data.

- 5. Create a simple plot.**

Create a simple plot for one aspect of all your remaining data.

- 6. Perform a mathematical function on the data.**

This could be the mean, standard deviation, sum, conversion etc.

If your performing the function on every row (i.e. adding 10), consider adding this to the data as a new column.

# Lab Tasks

## Tasks

**7. Filter the data further by some condition, plot this.**

Add an additional filter to the data, plot the data that meets this condition.

**8. Group and plot the data.**

Group the data based on some condition, plot the data from these groups.

**9. Research the Pandas and MatPlotLib documentation.**

The greatest skill of a programmer is their ability to search and understand the documentation! No one can remember every function and there will always be cases where you need something specific.

**Find a function that sounds interesting or useful, figure out how to implement it, and use it on your data!**

Documentation (this is easy to Google too!):

<https://pandas.pydata.org/docs/reference/index.html>

<https://matplotlib.org/stable/users/index.html>

# Notes