**Unfamiliar Libraries**

During this project I have used several unfamiliar libraries and constructs within my code. Usually they have been imported into python using pip through windows cmd. They are listed below.

**Sqlite3**

This is an included piece of software with python 3.x. It is used to interact with databases using SQL. While I am familiar with the use of SQL, I had to learn my way around the interaction with databases while using Python. I became familiar with the library using the page supplied by Python itself at <https://docs.python.org/2/library/sqlite3.html>

**Coinmarketcap**

This is a library created and provided by coinmarketcap, which is a leading Crypto currency market cap website. The API is imported via pip and then into the code with an import command. I used the documentation provided by coinmarketcap to figure out how to use this appropriately.

It allows you to send a request to the website for data on a specified coin. There is a lot of data provided that is irrelevant for this project, so I opted to only grab the coin name and associated USD price, which is then loaded into a dictionary. This was done to improve efficiency and bandwidth. It also increases the speed of several function within the program considerably.

**Matplotlib**

This library is one specifically designed for use with Python. It is again imported via pip and then imported into the code. Again I used the on-site documentation provided by the matplotlib developers.

This is used to create a Pie Chart to be output as a separate file, and gives a quick visual display of your holdings.

**Json and requests**

These are two standard libraries included in Python 3.x again. They are used to scrape data from webpages, and load into an array.

The data I have been using comes from a website that lists currencies and exchange rates live. When scraped you can then search through the array for the correct currency conversions for use in the currency toggle function.