# #Overview: Stock Analysis through Excel and VBA

The purpose of this analysis was to refactor code for the Stock Analysis dataset to improve code efficiency and logic, while enhancing usability and providing for a faster script. The analysis used the stock market dataset and VBA solution code to loop through all the data. Providing a “one button” approach to view data by year.

# #Results

The data for 2017 and 2018 showed the returns by tickers. Cells highlighted in green show positive returns and those in red show a negative return.

|  |  |  |
| --- | --- | --- |
| All Stocks (2017) | |  |
|  |  |  |
| **Ticker** | **Total Daily Volume** | **Return** |
| AY | 136,070,900 | 8.9% |
| CSIQ | 310,592,800 | 33.1% |
| DQ | 35,796,200 | 199.4% |
| ENPH | 221,772,100 | 129.5% |
| FSLR | 684,181,400 | 101.3% |
| HASI | 80,949,300 | 25.8% |
| JKS | 191,632,200 | 53.9% |
| RUN | 267,681,300 | 5.5% |
| SEDG | 206,885,200 | 184.5% |
| SPWR | 782,187,000 | 23.1% |
| TERP | 139,402,800 | -7.2% |
| VSLR | 109,487,900 | 50.0% |

|  |  |  |
| --- | --- | --- |
| All Stocks (2018) | |  |
|  |  |  |
| **Ticker** | **Total Daily Volume** | **Return** |
| AY | 83,079,900 | -7.3% |
| CSIQ | 200,879,900 | -16.3% |
| DQ | 107,873,900 | -62.6% |
| ENPH | 607,473,500 | 81.9% |
| FSLR | 478,113,900 | -39.7% |
| HASI | 104,340,600 | -20.7% |
| JKS | 158,309,000 | -60.5% |
| RUN | 502,757,100 | 84.0% |
| SEDG | 237,212,300 | -7.8% |
| SPWR | 538,024,300 | -44.6% |
| TERP | 151,434,700 | -5.0% |
| VSLR | 136,539,100 | -3.5% |

# Summary

## Disadvantages of Refactoring:

* Time consuming
* Requires testing over and over
* Bugs may form over the process

## Advantages of Refactoring:

* Improves the design of the analysis
* Provides for adaptability and ease of use
* Provides for faster code and programming

## Pros of Refactoring Original VBA Script:

* Script will become more efficient
* Script will be adaptable
* Analysis will have ease of use
* Provides for a fast code

## Cons of Refactoring Original VBA Script:

* The process may get messy with adding of new code into original
* The process may be lengthy in time
* There will most likely be bugs so