jmiu CS4306

quick hull

Uses Python 3.6

**REPORT**

Original Assignment

Implement the quick hull algorithm.

**Solution**

I implemented the quick hull algorithm as described on [wikipedia](https://en.wikipedia.org/wiki/Quickhull), with a single modification. This modification was reversing the order of `FindHull(S1, P, C)` and `FindHull(S2, C, Q)` when running on the top half of the points. Without this inclusion, the algorithm was not reliably producing a convex hull on the top points.

**Example Output**

Example output has been provided in the form of [plot.png](https://github.com/DariusMiu/quick-hull/blob/master/plot.png)

**Running**

Requires matplotlib, and several other included libraries to run.

Note: you can specify the number of points by passing it as an argument: `python qh.py 100`