## plot.sh design doc

goal: run monte\_carlo to gain data, separate the data according to which values are needed for each plot, and send a heredoc of plot info to gnuplot.

```
sudo:
set up files, run monte_carlo 500 times
loop 1(each line of data):
       if data point's circle value is 1, put it in tempBlue file
       else, put in tempRed file
gnuplot
       set terminal pdf
       set output
       set xlabel
       set ylabel
       set zero axis
       set title
       plot red, blue, and circle curve
run monte_carlo 65536 times
loop 2(each line of data):
       take iteration value and difference between pi guess and pi into tempGreen file
gnuplot
       set terminal pdf
       set output
       set xlabel
       set ylabel
       set zero axis
       set title
       plot tempGreen.dat
```