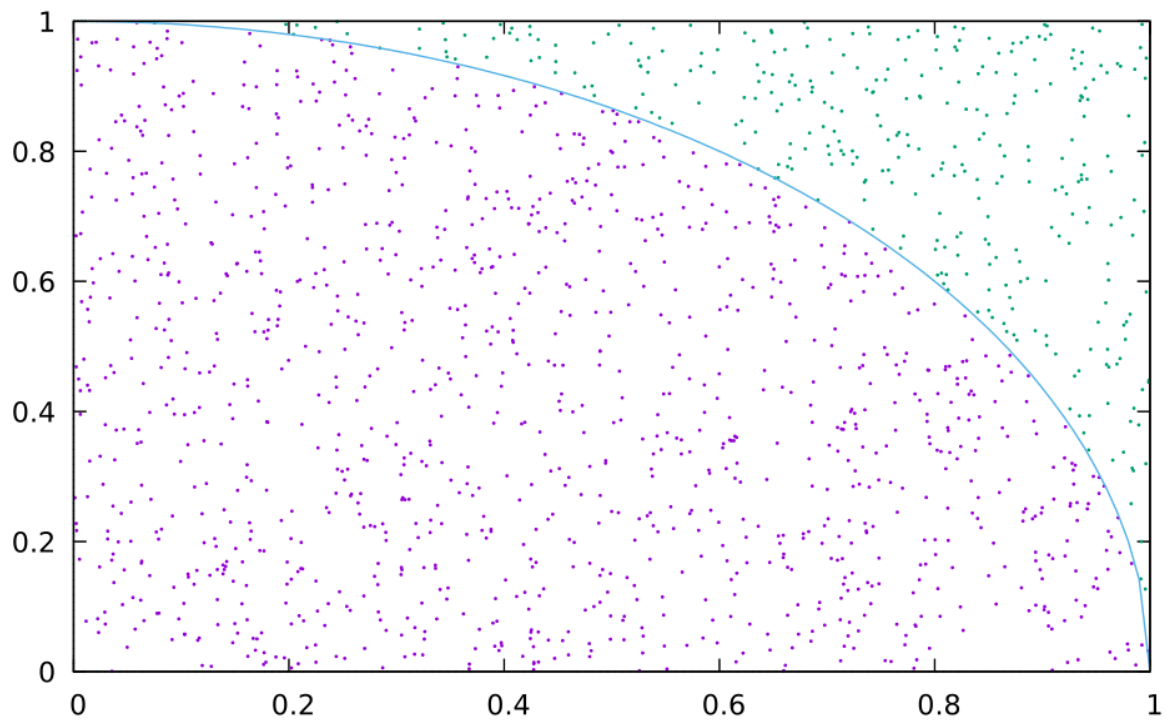


To produce this first plot, which shows monte carlo data within the [1:1] range, I ran monte carlo 1500 times and used a while loop, if statements, and the awk command to split the data up between values inside and outside of the circle. For the gnuplot heredoc, I created a function for the circle and plotted it alongside my two datasets on two 1:1 axes.



For the second plot, which is the error over the number of iterations, I called monte carlo 1000 times for 3 different files, each with a different seed. After using the same tricks to split up the data, I stored the iteration count and difference between each point's approximated pi and the real pi as ordered pairs. For the gnuplot heredoc, I plotted all 3 files separately as lines.

