

Design Document of Assignment 1  
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The purpose of the script is to print pi's Monte Carlo estimation after each random point it tests.

There will be a creation of bash script (plot.sh) file, which will serve as the main script, core of this assignment.

The first line of the script will start with `#!/bin/bash` which tells bash that this is an executable bash script.

Following that, use the command `'make'` to modify `'sincos.c'` and compile it to an executable.

Use `gnuplot` to call `monte underscore carlo.c` thus to produce a series of random coordinates.

Use `"/tmp/sin.dat"` to store the plots into a designated location.

Next, modify the output file using `'set output "sin.pdf"'`, `'set title "sin(x)"'`, `'set xlabel'` and `'set ylabel'`, which sets the output location, title of the sine function, label x and y axis.

Ultimately, run them in bash, plot `"/tmp/sin.dat"` with `linespoints`.