

Design.pdf

Manikantanagasai Illuri

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Objective

The objective of Asgn1 is to get used to the Unix System and to understand the basic syntax of C programming. Need to create a Bash script that generates two graphs based on data outputs from "monte carlo.c" file.

Initial Design

Below are the designs for Graph 1 and Graph 2

Graph 1:

- To generate this graph I will first call monte carlo using ./and run it 1000 times.
- Then I will take the data and store it in a tmp dat file.
- Then I will use awk (scripting language to generate reports) iterate through the tmp dat file and separate data based on the circle value
- If circle = 0 then I will take the x, y values and plot the dot as red which is outside the arc
- if circle value = 1 then I will take the x,y values and plot the dot as blue which is inside the arc

Graph 2:

- I will run monte carlo using ./
- Then I will run awk to read column 3 from the output and subtract it with the original PI value
- I will need to run this a total of 4 times

For each of the graphs I will use gnuplot commands to see the graph format equal to the example given.

