

Assignment 1

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1 Images

This is fig2.pdf which shows all the random points plotted on a graph points inside the circle are blue points outside are red.

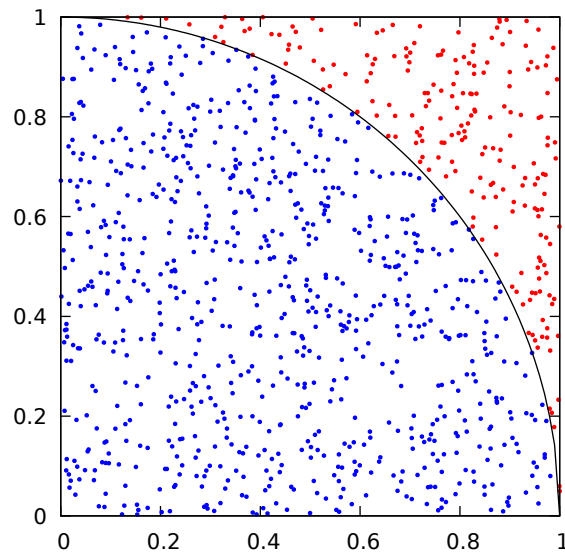


Figure 1: This fig2.pdf image

This is fig3.pdf which shows 5 different Monte Carlo simulations and their range or error to pi.

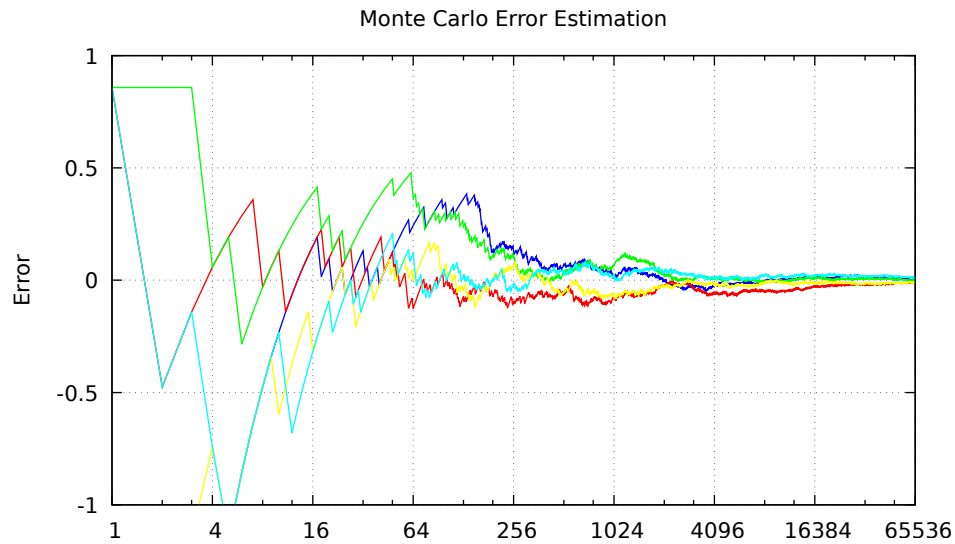


Figure 2: This fig3.pdf image

2 Unix Comands that were Used

- **bash**: wrote a script in bash as directed
 - file redirection: to store intermediate data
 - variables: to hold paramater values
 - if and test comands: to check if argument was passed
 - heredoc: used to write gnuplot script in file
- **grep**: used -v to filter out the head row and -E with regular expression to filter in and out of circle data
- **awk**: selects appropriate columns to use for data and calucate the difference between the estimate of pi and set value for pi
- **gnuplot**: can graph and create plots as needed for fig2.pdf and fig3.pdf