

COP701: Assignment-2

Software Specifications:

- The inputs should only be taken through the command line arguments only not by using scanf or any similar methods.
- The command line arguments for assignment-2 are in the following order:
<executable_name> <number_of_threads> <number_of_iterations>
- The output should show us the following parameters:
 - Accuracy
 - Speedup
 - Exact number of bits
 - Time taken
- For assignment-2, below should have the below make targets:
 - build : compile the source code and build the executable file from the object file.
 - run : execute the code with command line arguments passed through the command line.
 - clean : delete the executable and object file generated.
 - plot : plot the graph using the data collected during experimentation.

Submission Guidelines:

- The submission must contain the following things:
 - Report: A brief explanation about the numerical method used in the assignment followed by the reasoning behind choosing the numerical method over others. Plot a graph showing the variation between time taken to calculate the value of pi with the increase in number of threads given that accuracy is the same and write down your observation. Furthermore, add the plotted data in tabular format.
 - SVN / Git Log as a separate file, do not paste in the report.
 - Code for calculating the value of pi
 - The zip folder, which would be uploaded should have the following naming convention: <Entry_Number>-assignment-2.