

# CS3205 Networks Assignment-2 Readme

CS18B051

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## 1 Files we have

- a.cpp , this is a c++ code for enumalitng the tcp algorithm , it takes arguments at the command line.
- onegraph.py , this is a python code which generates graph for the out-file.txt produced by a.cpp after running.
- plot.cpp , this is a c++ code , which generates the output files for all the 32 possible combinations of the parameters ,used in technical report.
- pl.py , this is a python code to take the 32 output files generated by plot.cpp and plot graphs for each one .
- Makefile , doing make will produce all the things required to run the program.
- Report , a pdf with technical reports in the format asked .
- Readme file which tells how to run the program.

## 2 How to run

- We need to do `g++ -o a a.cpp` to produce the object file.which is equivalent to make a. Or simply doing Make will also form that.
- then on terminal do `./a.out` followed by space seperated double type arguments in the order  $K_i$  ,  $K_m$  ,  $K_n$  ,  $K_f$  ,  $P_s$  ,  $T$  .

- Doing the above two commands produces a outfile.txt , in which each line has value of updated  $CW$  value.
- Do python3 onegraph.py , it produces graph for the outfile.txt produced from running a.cpp and ./a.out
- To check graphs for the paramaeters used in the technical report , we need to run plot.cpp by command g++ -o plot plot.cpp , to generate object file plot . but doing make also generates plot object file.
- Do ./plot , this generates 32 output files with the names venu\_out1.txt , venuout\_2.txt and so on .
- Do python3 pl.py to get graphs for all the 32 output files generated using combination of parameters given in techinical report.The graphs will be saved as images.