This program can be run on OSU’s flip server, and I use Mac OS’s terminal to access OSU’s server and run it on.  
To run my program, be sure to put all my code in same directory, and type “./script.sh” If you encounter permission problem, do this before running the script:  
“chmod +x script.sh”.  
Since I did not declare environment variable NUMT and NUMTRIALS in project\_1.cpp, it would not be able to run by running the cpp file itself because I set this variable in the script file. But if the script is not working on your machine, you can remove the “//” before the define keyword in cpp file.  
By the way, the script will clear the object file and exe file when everything is finished.

Below is the actual report:

Table

Description automatically generated with medium confidence

I think the actual probability would be (6.63%+6.54%+6.55%+6.59%)/4=6.58% to hit the castle. According to this average value, the 8 threads with 500000 trials’ output is the closest and I think that’s the most correct one.  
S = 29.8/ 8.79 = 3.39

Fp = (8/7) \* (1-(1/3.39)) = 0.806