Scheduling Algorithms

This was a C++ project for an Operating Systems course. For this project, I had to implement first-come-first-serve and shortest-job-next algorithms. For both algorithms, the program generates a user-defined number of processes N, and generates a random service time for each process based on a user-defined average service time S, for those processes, as well as a random arrival time. The user also inputs a seed that the program uses for its random number generator. The program also calculates waiting time and turnaround time for each process based on how long the process has to wait before it gets serviced as well as how long it take from the time the process arrives to the time it finishes. For the first-come-first-serve algorithm, the processes are ordered by their arrival time, with the process with the lowest arrival time of the waiting processes being the one selected each time as the next job. For the shortest-job-next algorithm, the next process selected is the one with the shortest service time among the remaining waiting processes.