# SIT315 – Programming Paradigms

TaskM2.T2C: Complex Threading

### Greg McIntyre

### 218356779

### Document of your solution design listing data structures used and status of thread-safe, blocking vs nonblocking,

I am just uploading this as a status update for my progress, the sequential solution is almost complete in function, but I am unsure about;

“flexible number of producer and consumer threads” because I am using a file for data?

“use the right data strucutre (containers)” like docker containers?

“Implement your sequential solution” Almost complete

“Break it down to producer reads data, puts them in the queue; and consumer that reads from the queue and update a sorted list of top locations with highest records” Final sort remains TBC

### Your project code,

<https://github.com/gregorymcintyre/ProgrammingParadigms/tree/master/M2.T3D%20-%20Traffic%20Control%20Simulator>

TrafficProducer.cpp

TrafficConsumer.cpp

### Snapshot of your solution running, and

TBC

### Example datafile you used as input for your simulation - a file where each line has timestamp, traffic light id and number of cars recorded

<https://github.com/gregorymcintyre/ProgrammingParadigms/blob/master/M2.T3D%20-%20Traffic%20Control%20Simulator/log.txt>

log.txt