1. Download folder named ‘Controller Optimization’
2. Open the model: ‘Vehicle\_Model\_Controller\_Feb18’
3. Set stop time to 60 sec. Import dataset: ‘max\_turn’. Make sure to click ‘Mark for Simulation’
4. Open ‘optimize controller’. Set the script to stop after 1 iteration. Click the horizontal line next to line 68 to do so. A red dot should appear.

Chart

Description automatically generated

1. Run the script. The output will tell you how long that iteration took. To get time (minutes) until all iterations are complete, use the following formula, where num1, num2, num3 are variables in the script.
2. Repeat this procedure maybe a couple of times to ensure that the runtime is representative. If the time is acceptable, then continue to step 8. Otherwise, tune the time down to something more reasonable. The stop time can be reduced to 30 seconds (from step 3). os can be reduced from 25 to 20. os step size can be increased from 1 to 2. If those changes still don’t lead to a reasonable time, let me know.
3. Remove the red dot by clicking it. You are ready to run the simulation. Make sure to save the results when it is done. (exit\_flag, yaw\_accel\_error, yaw\_error).