MSU CSC 344, Fall 2016
Dec. 12, 2016. Example solution and outputs for simulation of Assn4.

The output of the simulation (output of Assn4) is the **total time spent in the Ready Queue by processes which at the end of the simulation are in the Terminated Queue.** *(If a process has been in the Ready Queue but at the end of the simulation that process is in the Ready or Run state, that process's time in the Ready queue is not part of the total.)*

Provided files in \\trace\..\344\download\Assignment\Assn4 Simulation Solution:
ProcessSim.cpp   *ProcessSim.exe*
Assn4_TestData1.txt   *Assn4_TestData8.txt*
Assn4_TestData2.txt   *Assn4_TestData10.txt*
Assn4_TestData5.txt   *Assn4_TestData20.txt*
BearPlot V1.4 documentation and usage.pdf   *BearPlot_V1_4.py*

(Optional. You need C++ for this step.) Compile the C++ program using the C++11 standard.
         g++ -std=c++11 -oProcessSim ProcessSim.cpp

(I think you do not need C++ for this step.) Run the executable C++ program (named "a") with an input data file, redirecting the output to a text file. Running this C++ program produces two output files: a human-readable text file **out.txt** and a special graphics file **simulation.dat** that you may use later.
         ProcessSim.exe Assn4_TestData20.txt > out.txt
Read the outcome of the simulation (Assn4) at the bottom of **out.txt**.

(Optional graphic animation. You need Python for this step.) Run a Python program to show an animated graphic simulation:
         python BearPlot_V1_4.py simulation.dat

The animation uses some abbreviations:
RTN -- Run Time Needed
RdTSF – Ready Time So Far. The sum of these in the Terminated queue is the output of Assn4. This value
         is updated only when a process is moved from state to state, not at each time unit while the
         process stays in the same state.
RnTSF – Run Time So Far. This value is updated only when a process is moved from state to state, not at
         each time unit while the process stays in the same state.

Expected outputs:

Test input filename	Total time spent in Ready Queue by processes in the Terminated Queue
Assn4_TestData**1**.txt	0
Assn4_TestData**2**.txt	11
Assn4_TestData**5**.txt	9
Assn4_TestData**8**.txt	9
Assn4_TestData**10**.txt	211
Assn4_TestData**20**.txt	801