Northern Michigan University (Marquette Co, MI)
CS 470-01-26W: Artificial Intelligence

Program 2
Due: Friday 27 February 2026 9:00 A.M. EDT

Simulated Annealing

Create a folder called "PG3" in the top level of your CS470-01-26W folder. Place all files pertaining to this assignment into the top level of your PG3 folder. Place a (possibly empty) file called "DONE" into this folder when you are ready to have your programs graded. The only files you need to turn in are the .py files. Please don't turn in any files other than these!!

Your program will ask the user to enter the name of an input file. From this point forward, your program will read from that file.

The input file will contain the following information:

The number of tasks to be completed.

The running time of each task.

The number of processors.

This is very similar to the program we did in class, except that in class we used simulated annealing to balance tasks over two processors. This time, the user can specify the number of processors. Use simulated annealing to balance the tasks among the processors so that the (parallel) time to full completion is as small as simulated annealing can make it.

You may have to play around with some of the parameters of simulated annealing (such as the distance function or the number of iterations to get the answers you like.