Fall 2020 – Dr. Victor DeBrunner

MTE: Due October 29, 11am

Problem Statement:

1. Write code to solve the 8-Queens problem using the following search strategies:
   i)   Backtracking (using informed search)
   ii) Forward checking
   iii) Arc consistency
   iv) Iterative improvement
   v)   Hill Climbing (your choice of variant)
2. Your code should allow for random starting, and for placed starting.
3. Analyze your results in terms of memory usage and computational effort.

You should turn in:

■ All files turned in should be named using the convention NAME_xxx where NAME is your name, and xxx is the logical descriptor. For example, my write-up would be DEBRUNNER_analysis

■ Your code listing (python) and directions. You may use python code available on the course website (https://github.com/aimacode) as long as you clearly document your use. Your code must be checkable through the canvas portal.

■ A short 5 minute video demonstrating some portion (or all) of your code in operation.

Your grade will be split as follows:
1. 50% for working code
2. 25% for your analysis
3. 25% for your demonstration video

You may not work with anyone on the exam, except to get help setting up your python workspace.

Signature: _____ Date: _____