**CSc 44800, Artificial Intelligence, Fall 2024**

**Assignment 2**

**Due October 10, 2024, at midnight**

1. Implement the A\* search algorithm in a Python program
2. Use the A\* search program you develop to determine the shortest path from Timisoara to Bucharest.
   * + Using the Romania map data from the classroom lectures, the textbook, and the Excel spreadsheet that I’ve posted in Blackboard
     + Use miles for your distances.
     + Use the straight-line distances in the Excel spreadsheet rather than those in the textbook.
     + Print out the steps your search uses to demonstrate what’s going on.
     + **Discuss your results.**

Please submit your work on Blackboard as an ipynb file. Please name your file as

LastName\_FirstName\_AS02.ipynb

You must discuss your answers and describe how you came up with them. Show your work. Just stating a correct answer won’t get you more than half credit.

If you collaborate on this or any other assignment, you must have contributed substantially to anything you submit; just using a classmate’s work without having contributed substantially to it is not collaboration -- it’s cheating.

If you collaborate with anyone you must indicate with whom you collaborated.