

Name:	Date:	Period:
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Lab05: A-Star Search

- Attach a code printout.
- What is the optimal path cost from Pitesti to Oradea? Run both a Uniform Cost and an A-Star Search.
- Consider the size of the queue to be the number of paths in the queue. If `queue` is a list of paths in Python then we can calculate this with `size=len(queue)`. Using this definition, what is the size of the queue at each step of the above searches?

Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14
U.C.														
A*														

- Now consider the size of the queue to be the number of total nodes instead. If `queue` is still a list of paths and each path is a flat (possibly heterogeneous) list then we can calculate roughly this size using `size=sum([len(p) for p in queue])`. Using this definition, what is the size of the queue at each step?

Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14
U.C.														
A*														

- Run just an A-Star from Giurgiu to Neamt. Print out the city at the end of each path that comes out of the queue. Write down these cities in order.

Official Use Only

Header:	Name	Correct Date	Program Description
Style:	Comments	Variable Names	Modular
Data Structures:	Obvious	General	Lean
Algorithm:	Clear	Correct	Efficient
Scoring:	Raw _____	Late _____	Total _____