
National Institute of Technology Calicut

Assignment II - Date of Submission - 24th March 2023

CS6172D Artificial Intelligence

1. [1 mark] Consider the following graph representing distances between cities in Romania.

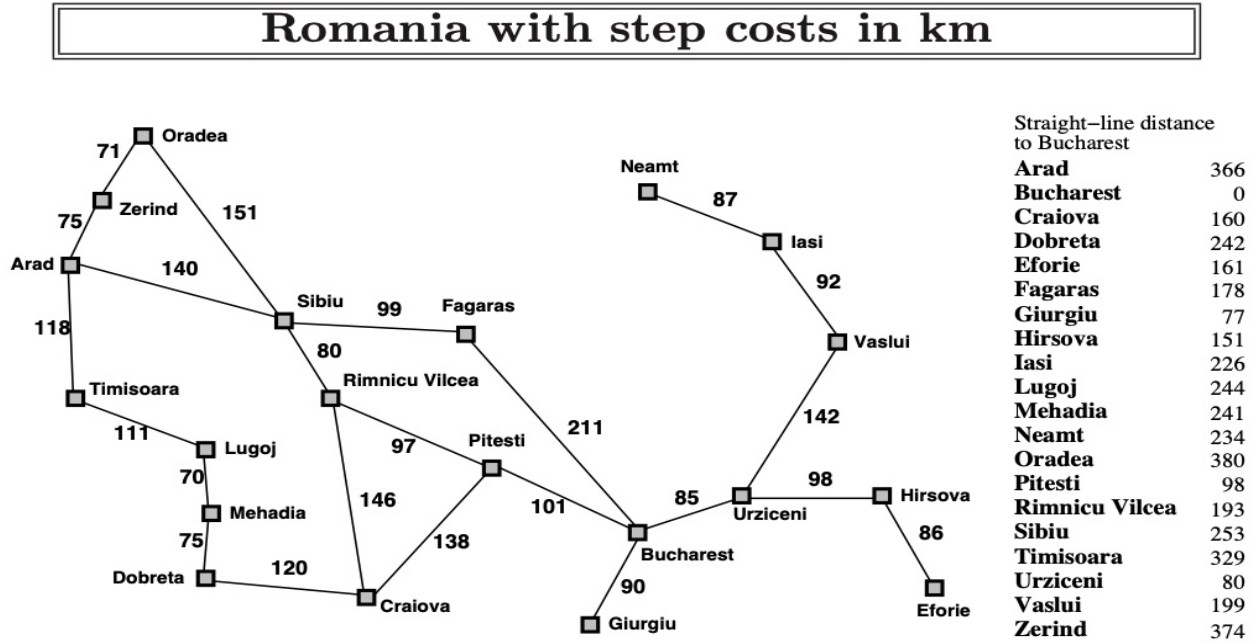


Figure 1:

- Implement the following search algorithms to find the path from Arad to Bucharest.
 - Depth-First search
 - Greedy Best-First search
 - Uniform-Cost search
 - A* search
- What would be the effect of the following algorithms on the above problem?
 - Simulated Annealing
 - Genetic Algorithm
- What are your observations about uninformed search, informed search, probabilistic search and meta-heuristic search algorithms on the Arad to Bucharest path finding problem?

[Note : Implementations may be in Python (preferred language). Submit the zip file containing the code and the corresponding outputs, named with your roll number.]