Mid-Term

Lecture: Bui Thanh Hung

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Yêu cầu

Báo cáo

Với mỗi vấn đề trình bày:

- a. Câu trúc dữ liệu
- b. Giải thuật
- c. Bô Test

Tự đánh giá: Problem 1 a. b. c.

Problem 2 a. b. c.

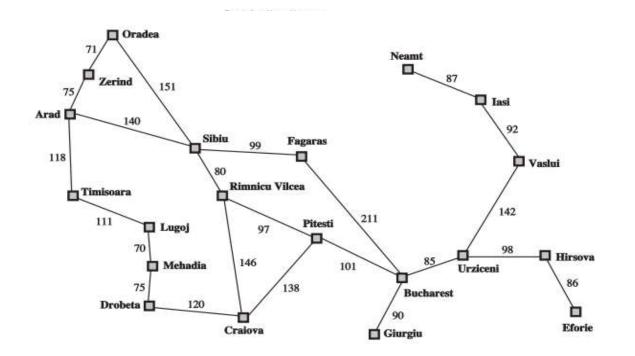
Time Schedule

Submit to ELearning, 24h ngày 11/03/2021

Chấm bài: Demo + Trả lời câu hỏi: Buổi thực hành ngày 12/03/2021

PROBLEM

Exerise 1 (5 points): Travelling in Romania



Straight-line distar	ice
to Bucharest	
Arad	366
Bucharest	0
Craiova	160
Dobreta	242
Eforie	161
Fagaras	176
Giurgiu	77
Hirsova	151
lasi	226
Lugoj	244
Mehadia	241
Neamt	234
Oradea	330
Pitesti	100
Rimnicu Vilcea	
Sibiu	253
Timisoara	329
Urziceni	30
Vaslui	199
Zerind	374

Install following Algorithms:

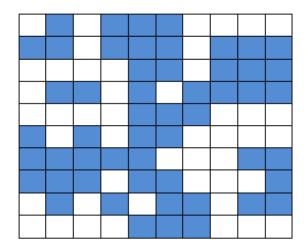
- Greedy Best First Search (2.5 points)
- A* (2.5 points)

Example: from **Arad to Bucharest**

Exerise 2 (5 points):

Find the number of islands using algorithms as follows:

- BFS (Breadth First Search) (2.5 points)
- UCS (Uniform Cost Search) (2.5 points)



1		2				3	3	3	3
		2				3			
2	2	2	2			3			
2			2		3				
2	2	2	2				5	5	5
	2		2			5	5	5	5
					5	5	5		
			4			5	5	5	
4		4		4			5		
4	4	4	4				5	5	5

Input: Green color: sea , land: white color

Output: 5 islands