ĐẠI HỌC QUỐC GIA THÀNH PHỐ HỒ CHÍ MINH
TRƯỜNG ĐẠI HỌC KHOA HỌC TỰ NHIÊN
KHOA CÔNG NGHỆ THÔNG TIN

Course: CSC14003 – Introduction to Artificial Intelligence

Class 20CLC– Term II/2021-2022

Lab01: The Knight's Tour

20127142 – Lê Phi Dương

Môn học: Cơ sở AI

Contents

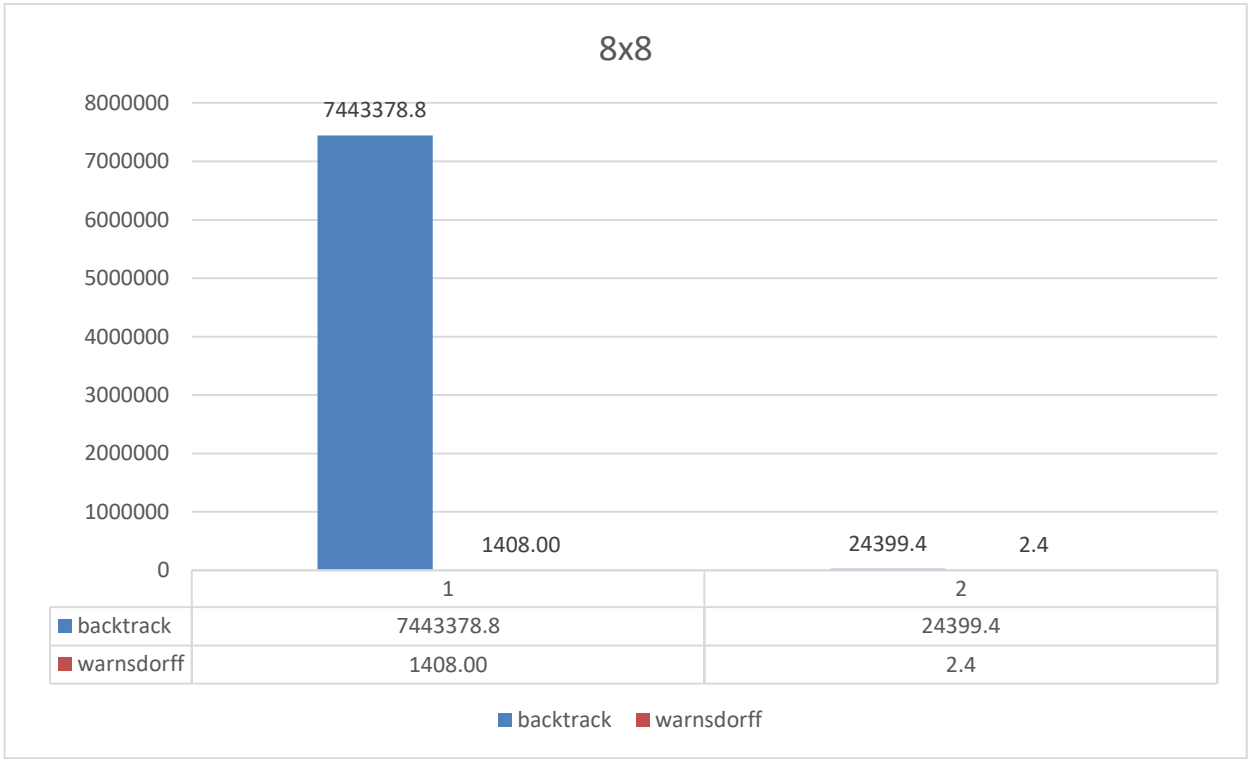
I. Checklist

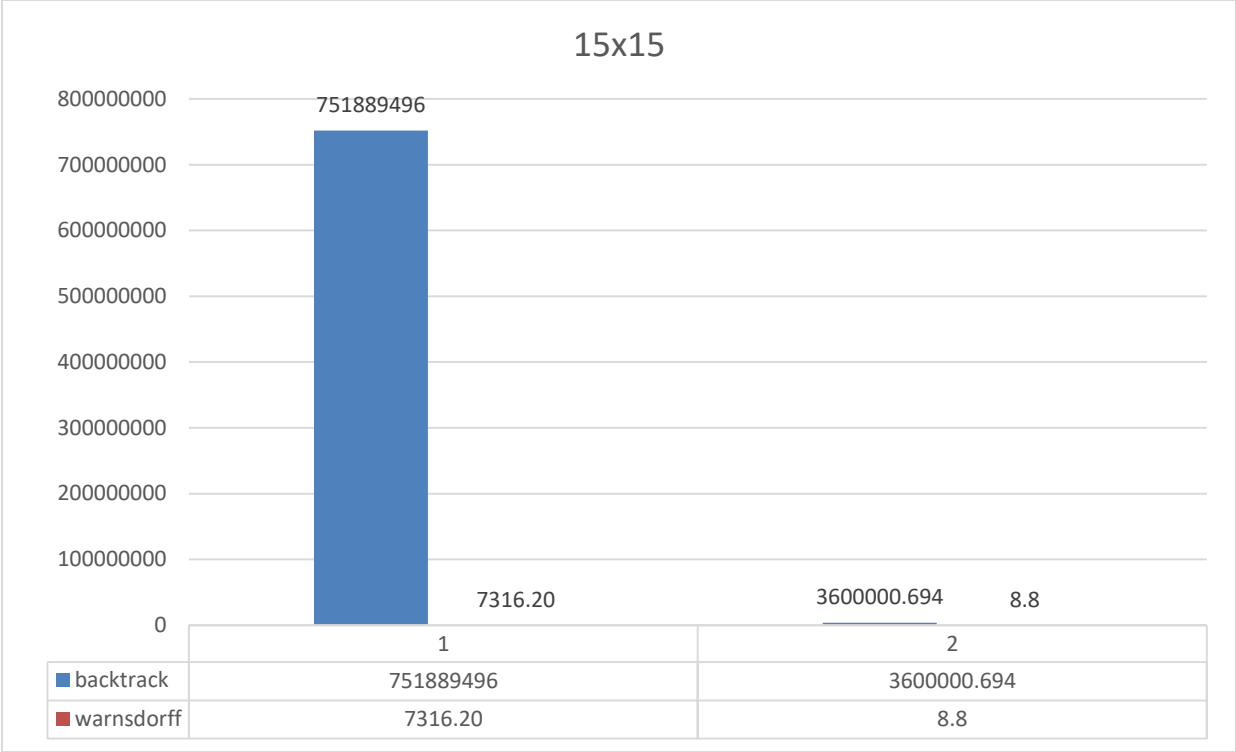
#	Criteria	% credits	% Finish percent
1	Manipulate the input and output	10	100
2	Implement the backtracking	10	100
3	Implement the Warnsdorff's Heuristic	10	100
4	Provide valid results for the backtracking strategy	20	80
5	Provide valid results for the Warnsdorff's Heuristic	20	80
6	Provide all evidential files in the OUTPUT folder	10	100
7	Report sufficient information in the document (This will be ignored if your work does not meet Criteria 6)	20	100

*** Some positions of board in warnsdorff can't run normally and run out of list index instead of writing board and number of steps it has run. Same as backtrack algorithm. Except these positions that I mentioned, the program worked correctly.**

II. Report sufficient information

***1: number of steps, 2: Run-time**

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warnsdorff
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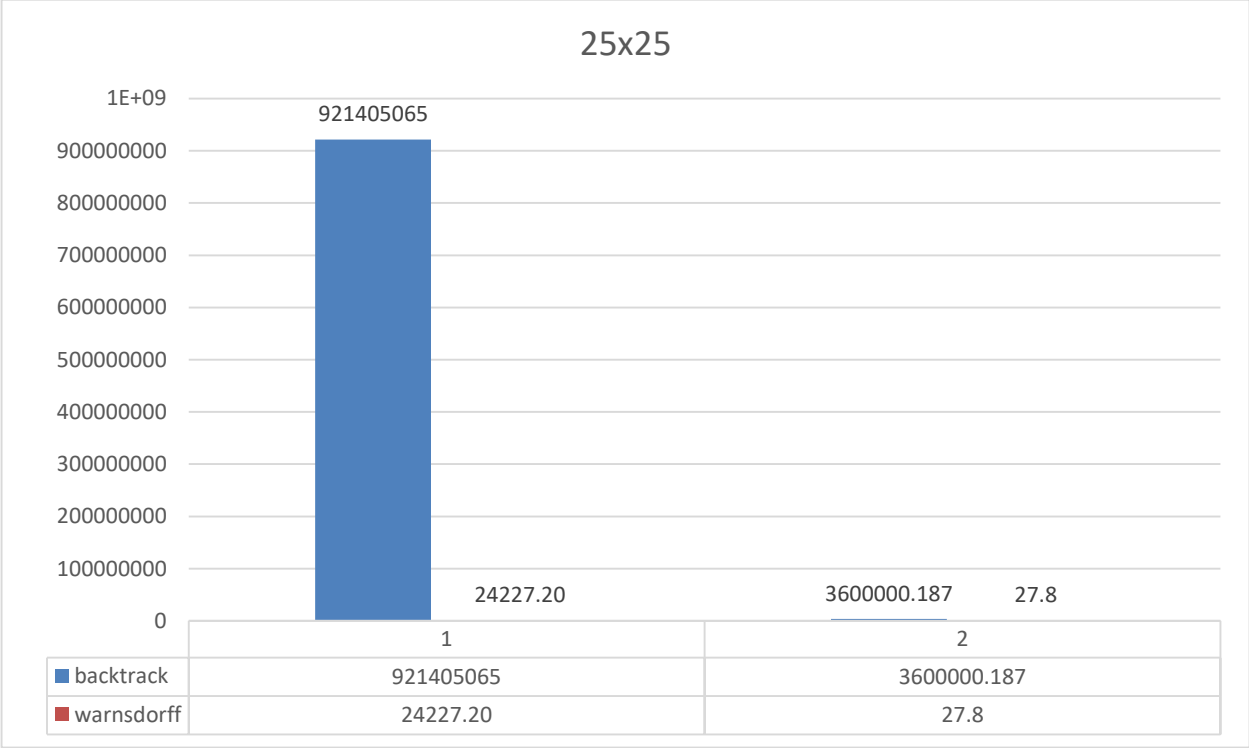
8.8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2
backtrack
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warnsdorff
24227.20
27.8

III References

https://www.geeksforgeeks.org/warnsdorffs-algorithm-knights-tour-problem

https://vi.wikipedia.org/wiki/B%C3%A0i_to%C3%A1n_m%C3%A3_%C4%91i_tu%E1%BA%A7n