CS420 – Lab01 The Knights' Tour

Student ID: 18125006

Full name: Phạm Lê Thùy Dung

1. Checklist:

- ✓ Manipulate the input and output
- ✓ Implement backtracking
- ✓ Implement the Warnsdorff's Heuristic
- ✓ Provide valid results for the backtracking strategy
- ✓ Provide valid results for the Warnsdorff's Heuristic
- ✓ Provide all evidential files in the OUTPUT folder
- ✓ Report sufficient information in the document

2. Statistical result:

Board size	Backtracking		Heuristic	
	Average time (ms)	Average number of moves	Average time (ms)	Average number of moves
5x5	4868.018	775388	0.19989	15
8x8	90833.57	13475343	1.401758	64
15x15	> 3600000	-	3.796768	225
25x25	> 3600000	-	15.78851	625
40x40	> 3600000	-	38.88059	1589

Running time of strategies in log(μs)

■ Backtracking ■ Heuristic ■

Number of moves of strategies in log(moves)

■ Backtracking ■ Heuristic ■