

## COMP 3710 - 3 Applied Artificial Intelligence (3,1,0) Fall 2017

Seminar/Lab 3
Local search, and CSPs

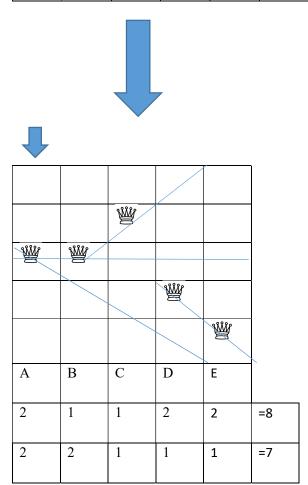
**Instructor:** Mahnhoon Lee

**Student Name:** ZHENYU WANG **Student Number:** T00059541

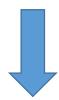
## 1. Local search for 5-queens problem

## • Initial board

		<b>\\\\\</b>			
	<b>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</b>				
			<b>W</b>		
				<b>W</b>	
A	В	С	D	E	
2	1	1	2	2	= 8

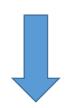


1	2	1	1	1	= 6
2	2	2	1	1	=8
1	1	1	1	2	=6

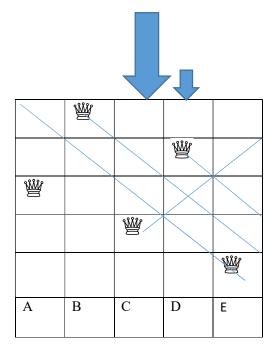




	<b>W</b>			
В	С	D	E	
1	1	1	1	= 4
3	1	2	2	= 9
2	1	1	1	= 6
2	0	2	1	= 5
1	1	1	2	= 6
	B 1 2 2	B C 1 1 2 1 2 0	B C D  1 1 1 3 1 2 2 1 1 2 0 2	B C D E  1 1 1 1 3 1 2 2 2 1 1 1 1 2 0 2 1

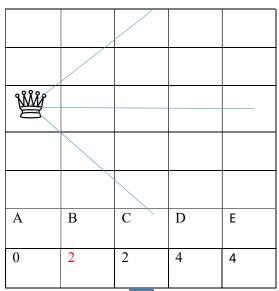


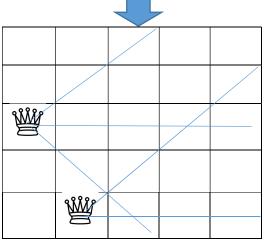
		<b>1</b>			
	<b>W</b>				
<u></u>					
		<u></u>	<b>W</b>		
				<b>W</b>	
A	В	С	D	E	
1	1	1	1	1	= 5
0	1	1	1	1	= 4
1	0	2	2	2	= 7
0	0	1	2	1	= 4
0	0	1	2	2	= 6



0	1	0	1	0	= 2
0	0	0	0	0	= 0
					(Find
					Goad)
0	1	1	1	0	= 3
0	0	1	2	1	= 4
0	0	1	2	1	=4

## 2. CSP





A	В	С	D	E
		1	3	2
w				
	\$\$\$\$\$₽			
A	В	C	D	E
A	Б		1	2
			1	
	,			
		<b>W</b>		
W				
			W	

W

A	В	С	D	E
				1



	/			₩
	/ .	WW		
W				
			WW	
	WW			
A	В	С	D	E
				0
				(Find
				Goal)