

Introduction to Multi-Agent-Programming

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Exercise Sheet 9

Due: Jan. 11st, 2011

Exercise 9.1 (Ant Colony Optimization)

A salesman t need to visit three cities $\{c_1, c_2, c_3\}$ in the following grid world. He wants to travel as short as possible.

4	c_3				c_1
3					
2	t				
1				c_2	
0					
	0	1	2	3	4

- (a) Use ant colony optimization to formulate the problem (2pts)
- (b) If the number of episodes is 1, the number of ants is 3, **compute the trajectory of the salesman, please show the process** (3pts)

This exercise should be submitted during the lecture on Tuesday (Jan. 11st)