COMP111 - Tutorial 3 Answers

Ben Weston

October 28, 2020

2. As shown in table 1 the Greedy Search algorithm returned a path of $a \to d \to e \to$ with a cost of 10.

Expanded Path	Frontiers
	a:8
a not goal state	ab:5, ac:7, ad:3
ad not goal state	ab:5, ac:7, ade:0
ade is goal state	ab:5, ac:7

Table 1

3. As shown in table 2 the A* algorithm returned a path of $a \to b \to e \to$ with a cost of 8.

Expanded Path	Frontiers
	a:8
a not goal state	ab:8, ac:9, ad:4
ad not goal state	ab:8, ac:9, ade:10
ab is not goal state	ac:9, ade:10, abe:8
abe is goal state	ac:9, ade:10

Table 2