NOTES: PLEASE USE THIS GENERAL FORMAT FOR YOUR REPORT. YOU CAN USE WORD OR SOME OTHER TEXT-PROCESSING TOOL OR JUST USE THIS TEMPLATE ADDING THE DATA WHERE NEEDED. PLEASE REMOVE THESE INSTRUCTIONS PRIOR TO CONVERTING TO PDF AND TURNING THIS IN. BE SURE TO NAME THE NEW FILE PROPERLY, AS EXPLAINED IN THE A2 SPECIFICATION.

A2_Report.pdf

partner 1 firstname and lastname: Haokun Cai

partner 1 student number:1832787

partner 1 uwnetid: haokun

partner 2 firstname and lastname:

partner 2 student number:

partner 2 uwnetid:

Assignment 2 Report -- Heuristic Search

CSE 415: Introduction to Artificial Intelligence Winter, 2021

1. Results with Heuristics for the Eight Puzzle

				ges Soln Cost +	•	
A	none (UCS)) Y	7	 7 +	166	101
A	Hamming	Y	7		8	6
A	Manhattan	Y	7		27	20
B	none (UCS)) Y	12	12 +	1490	898
B	Hamming	Y	12	12 +	96	72
B	Manhattan	Y	12	12 +	162	103
C	none (UCS)	Y	14	 14 +	4070	2290
C	Hamming	Y	14	 14 +	196	127
C	Manhattan	Y	14	 14 +	386	218
D	none (UCS)) Y	16	 16 +	7982	4700
D	Hamming	Y	16	+ 16 +	617	365
D	Manhattan	Y	16	+ 16 +	993	593

Puzzle A: [3,0,1,6,4,2,7,8,5]

Puzzle B: [3,1,2,6,8,7,5,4,0] Puzzle C: [4,5,0,1,2,8,3,7,6] Puzzle D: [0,8,2,1,7,4,3,6,5]

2. (Optional) Evaluating Our Custom Heuristics