

## CIS 365 Informed Search Assignment

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Choose an informed search algorithm discussed in class. Select a heuristic for the algorithm to use. Implement the chosen algorithm using the selected heuristic. Answer the following question:

Can the chosen algorithm determine a path from A1 to H9? Why or Why not? What sort of changes would you have to make to your algorithm in order for it to generate a path to the goal node (H9)?

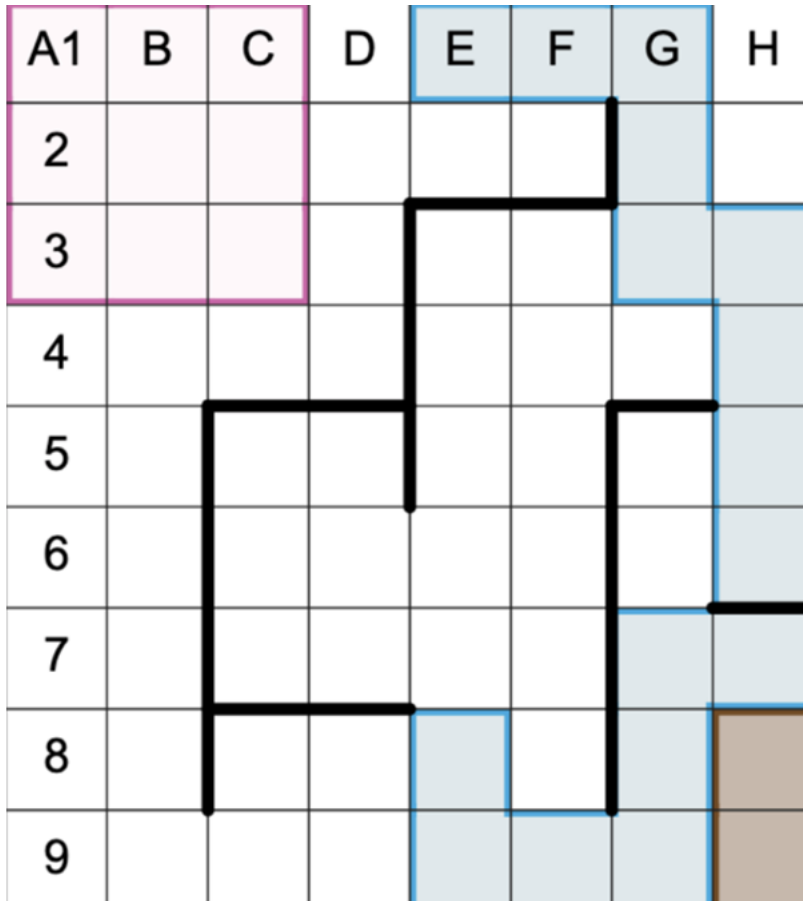


Figure 1 Map to be used for the informed search algorithm, walls are the black solid lines, the pink/blue/brown background coloring can be ignored for the purposes of this assignment.

**Hand-in:**

1. A word document exported into PDF format that includes the following:
  - a. Answer to the above question
  - b. Output of the selected informed search program on the above map (screenshot)
2. Source code used to generate the output from the selected informed search algorithm (no zip files)

**Grading Rubric:**

	0	50%	100%
Selected Informed Search Algorithm Implementation (40%)	Algorithm not correctly implemented	Algorithm contains a single error in the implementation	Algorithm successfully implemented
Chosen Heuristic (20%)	Heuristic doesn't make any sense.	Heuristic makes sense	Heuristic was well selected and makes sense.
Question Answered (20%)	The question wasn't answered very well...	The answer could use some more work...	Question answered well, with good sound reasons.
Display/Output (20%)	Incorrect output and/or not easy to read	Correct output, but not easy to read	Output is easy to understand and clearly communicates the correct output.