Informed Search

THE PANCAKE PROBLEM (100 Points)

A messy cook has a disordered stack of 5 differently-sized pancakes [size from 1 to 5] and a spatula that can be inserted at any point in the stack and used to flip all pancakes above it. The goal is for the cook to have them in the "correct" order for the customer, that is, the large on the bottom up to the smallest on top ([5, 4, 3, 2, 1]).

1. Define the problem as a searching problem
2. Define a possible cost function (backward cost)
3. Define a possible heuristic function (forward cost)
4. Implement an A* algorithm in your language of preference

BONUS (10 Points)

Could the Uniform-Cost-Search algorithm be used? If so, provide an implementation of the same Pancake Problem with UCS.

SUBMISSION

Submit your solutions via Canvas.