CS 402 Artificial Intelligence Summer 2015 Second Programming Assignment Due: Tuesday, July 21, 2015

Implement the following program in standard Racket or Python.

1. A function called JHusbands that solves a generic version of the Jealous Husbands problem. It takes as input (1) the number of husbands and wives, and (2) the capacity of the boat. The order of parameters should be (a) number of husbands and wives and b) capacity of the boat. Note that some parameters pose problems impossible to solve and your program must have some way of detecting this fact.

If a search is successful, the program should output a solution. If a search fails, it should output the sequence of explored states before the program judged the problem impossible. In this case, it should also output a brief statement indicating the judgment your program made to determine that no solution exists. There are no specific formatting requirements for this output other than that it be easily interpretable on casual inspections.

Submit this program on Canvas.

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¹ Assumed to be the same, i.e., there is no polygamy or polyandry.