pd8 hw77 2019-06-04 Eric Lau

a queens problem

place ranks queens on a ranks by ranks chess board such that none of the queens are under attack

problem

return a collection of all solutions to a queens problem of size ranks, when given a board that is populated legally through rank lastRankFilled

recursive abstraction

when asked to [problem statement] the recursive abstraction can return a collection of all solutions to a queens problem of size ranks with a board that is populated legally through rank lastRankFilled + 1.

recursive solutions

for each rank

place a queen on the current spot invoke the recursive abstraction

base cases solutions

if there is no legal solution return (?) if lastRankFilled is equal to ranks – 1 return (?)