

Step1 : Before starting the simulation of 4queen problem, push the 4-queen into the stack.

Step2 : The no .of. queens will define the no .of. simulation that need to be run. So there would be 4 simulation. Start the 1st simulation.

Assume [0->space/no queen placed , 1->queen/queen placed].

Step3 : Start the traversing from the 1st row and check whether the queen is already exists in the row , column and 4 diagonal direction. If the queen is already placed, you need to move to the next column and follow the same thing.

Step 4 : Once you place the queen following the concept of step 3. You can find that in 2 simulations, 1 queen cannot be placed. Which indicates that the simulation result is failed.so we need to move for next simulation by following same step 3.

Step 5 : Whenever you move to the next simulation, you need to refresh the stack and reset the board all to zeros and follow the step 3, until the total simulation completes.

Step 6 : Hence we would get exactly 2 correct/passed simulation, one of these or both would be the answer for the 4 queen problem. Hence we did this without using the "Backtracking" as well as "Recursion".