

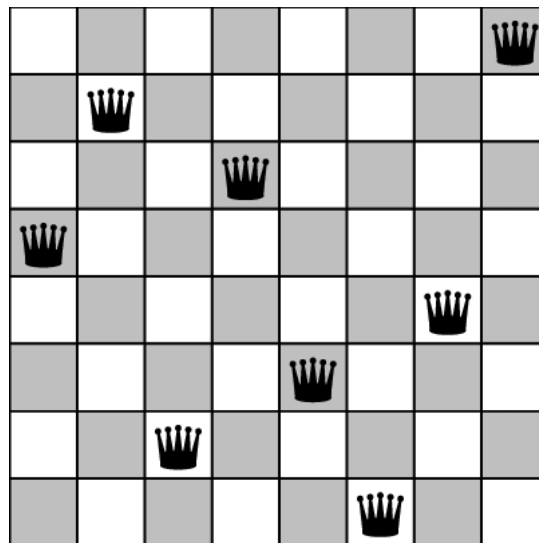
AYDIN ADNAN MENDERES UNIVERSITY

CSE 419 ARTIFICIAL INTELLIGENCE

ASSIGNMENT#2

Due Date: 24.04.2022 23:59

Consider the figure shown below.



Create a random state of the 8-queens board and reach the final position as shown above using Constraint Satisfaction Problems with using number of attacking queens heuristic in each column as shown in Slide#34 of the related week's presentation (Week#6). Create a new "min conflicts" constraint for attacking queens in each column. Check NQueensCSP [1] and DiffNotEqualConstraint [2] source codes to understand how to define your own constraint. Print each change of the steps, the number of nodes expanded (and additional metrics if required) and the final situation on the console.

[1]<https://github.com/aimacode/aima-java/blob/AIMA3e/aima-core/src/main/java/aima/core/search/csp/examples/NQueensCSP.java>

[2]<https://github.com/aimacode/aima-java/blob/AIMA3e/aima-core/src/main/java/aima/core/search/csp/examples/DiffNotEqualConstraint.java>