Exercise 10

CSE2012 DAA Lab

Slot: L33+L34

Faculty: Dr M Janaki Meena

N-Queen Problem Description

The N Queen is the problem of placing N chess queens on an N×N chessboard so that no two queens attack each other. Two queens are said to attack each other if they are placed on the same row, same column or if they are diagonally placed

1. Given the value of 'n' as input, write a recursive procedure to find all solutions to place them on a nxn board such that they do not attack each other.

2. Given the value of 'n' as input, write a recursive procedure to find only one solution to place them on a nxn board such that they do not attack each other.

3. Given the value of 'n' as input, write an iterative procedure to find only one solution to place them on a nxn board such that they do not attack each other.

4. Given the value of 'n' as input, write an iterative procedure to find all solutions to place them on a nxn board such that they do not attack each other.

5. Given the value of 'n' as input, write an iterative procedure to find out solutions that are not mirror images to place them on a nxn board such that they do not attack each other.