

```
#include <bits/stdc++.h>

using namespace std;

int board[11][11];

bool isPossible(int n,int row,int col){

// Same Column
for(int i=row-1;i>=0;i--){
    if(board[i][col] == 1){
        return false;
    }
}
//Upper Left Diagonal
for(int i=row-1,j=col-1;i>=0 && j>=0 ; i--,j--){
    if(board[i][j] ==1){
        return false;
    }
}

// Upper Right Diagonal

for(int i=row-1,j=col+1;i>=0 && j<n ; i--,j++){
    if(board[i][j] == 1){
        return false;
    }
}

return true;
}

void nQueenHelper(int n,int row){
    if(row==n){
        // We have reached some solution.
        // Print the board matrix
        // return

        for(int i=0;i<n;i++){
            for(int j=0;j<n;j++){
                cout << board[i][j] << " ";
            }
        }
        cout<<endl;
        return;
    }

    // Place at all possible positions and move to smaller problem
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    for(int j=0;j<n;j++){

        if(isPossible(n,row,j)){
            board[row][j] = 1;
            nQueenHelper(n,row+1);
            board[row][j] = 0;
        }
    }
    return;

}

void placeNQueens(int n){

    memset(board,0,11*11*sizeof(int));

    nQueenHelper(n,0);

}

int main(){

    placeNQueens(4);
    return 0;

}

```