

## Experiment 9

### TASK – 1

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**CLASS: 607A**

**SUBJECT: CC LAB**

1. Aim:

Construct the array

2. Code :

```
#include<bits/stdc++.h>
using namespace std;
int board[11][11]; int n;

bool isSafe(int row, int col) {
    // column check    int count=0;
    for(int k=0; k<row; k++)
        if(board[k][col]==1)
            return false;

    //upper right diagonal
    int k=row; int l=col;
    while(k>=0 && l<n)
    {
        if(board[k][l]==1)
            return false;
        k--; l++;
    }

    //upper left diagonal
    k=row; l=col;
    while(k>=0 && l>=0)
    {
        if(board[k][l]==1)
            return false;
        k--; l--;
    }

    return true;
}
```

```

bool NQueen(int row) {
    if(row >= n)
        return true;

    for(int i = 0; i < n; i++)
    {
        if(issafe(row, i))
        {
            board[row][i] = 1;
            if(NQueen(row + 1))
                return true;
            board[row][i] = 0;
        }
    }
    return false;
}

void print1() {
    for(int i = 0; i < n; i++) {
        for(int j = 0; j < n; j++) {
            cout << board[i][j] << " ";
        }
        cout << endl;
    }
}

int main() {
    cin >> n;
    for(int i = 0; i < n; i++)
        for(int j = 0; j < n; j++)
            board[i][j] = 0;

    if(NQueen(0))
        print1();
    else
        cout << "Not possible";

    return 0;
}

```



You have earned 35.00 points!

You are now 134.57 points away from the 4th star for your problem solving badge.

51%

340,43/475

## Congratulations

You solved this challenge. Would you like to challenge your friends? [f](#) [t](#) [in](#)

[Next Challenge](#)

### Test case 0

Test case 1

Test case 2

Test case 3

Test case 4

Test case 5

Test case 6

#### Compiler Message

Success

#### Input (stdin)

1 4 3 2

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#### Expected Output

1 3

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