

Code:

```
#include <iostream>
using namespace std;

int count = 0;

void print1D(int board[], int n) {
    for (int i = 0; i < n; i++) {
        cout << board[i] << " ";
    }
    cout << endl;
}

void print2D(int board[], int n) {
    for (int i = 0; i < n; i++) {
        for (int j = 0; j < n; j++) {
            if (board[i] == j) {
                cout << "Q ";
            } else {
                cout << ". ";
            }
        }
        cout << endl;
    }
    cout << endl;
}

bool isSafe(int board[], int row, int col, int n) {

    for (int i = 0; i < row; i++) {
        if (board[i] == col) {
            return false;
        }
    }

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

    return true;
}
```

```
}
```

```
void solveNQueen(int board[], int row, int n) {
```

```
    if (row == n) {  
        count++;  
        cout<<endl;  
        print1D(board, n);  
        cout<<endl;  
        print2D(board, n);  
        return;  
    }
```

```
    for (int col = 0; col < n; col++) {  
        if (isSafe(board, row, col, n)) {  
            board[row] = col;  
            solveNQueen(board, row + 1, n);  
  
            board[row] = -1;  
        }  
    }  
}
```

```
int main() {  
    int n ;  
    cout<<"\nEnter the value of n: ";  
    cin>>n;  
  
    int board[n];  
    for (int i = 0; i < n; i++) {  
        board[i] = -1;  
    }  
    solveNQueen(board, 0, n);  
    cout << "Total number of calls to queen procedure: " << count << endl;  
    return 0;  
}
```

Sample Output:

Enter the value of n: 4

1 3 0 2

. Q . .

. . . Q

Q . . .

. . Q .

2 0 3 1

..Q.

Q...

...Q

.Q..

Total number of calls to queen procedure: 2