

```

#include<bits/stdc++.h>

#define N 4

using namespace std;

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

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

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

```

```

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

bool nqueen(int board[N][N],int col)
{
    if(col>=N)
        return true;

    for(int i=0;i<N;i++)
    {
        if(isSafe(board,i,col)){
            board[i][col]=1;

            if(nqueen(board,col+1))
                return true;

            board[i][col]=0;
        }
    }

    return false;
}

bool solveNQ()
{

```

```
int board[N][N]={  
    {0,0,0,0},  
    {0,0,0,0},  
    {0,0,0,0},  
    {0,0,0,0},  
};  
if(nqueen(board,0)==false)  
{  
    cout<<"solution doesnt exist";  
    return false;  
}  
printboard(board);  
return true;  
}  
int main()  
{  
    solveNQ();  
    return 0;  
}
```