کد 8 وزیر

فاطمه خیری

```python
N = 8

def printSolution(board):
    for i in range(N):
        for j in range(N):
            print(board[i][j], end=" ")
        print()

def isSafe(board, row, col):
    # Check this row on left side
    for i in range(col):
        if board[row][i] == 1:
            return False

    # Check upper diagonal on left side
    for i, j in zip(range(row, -1, -1), range(col, -1, -1)):
        if board[i][j] == 1:
            return False

    # Check lower diagonal on left side
    for i, j in zip(range(row, N, 1), range(col, -1, -1)):
        if board[i][j] == 1:
            return False

    return True

def solveNQUtil(board, col):
    if col >= N:
        return True

    for i in range(N):
        if isSafe(board, i, col):
            board[i][col] = 1
            if solveNQUtil(board, col + 1):
                return True
            board[i][col] = 0

    return False
```

```python
def solveNQ():
    board = [[0 for _ in range(N)] for _ in range(N)]

    if not solveNQUtil(board, 0):
        print("Solution does not exist")
        return False

    printSolution(board)
    return True

solveNQ()
```

```
0 0 0 0 0 0 1 0
0 0 0 0 1 0 0 0
0 0 0 0 0 0 0 1
0 1 0 0 0 0 0 0
0 0 0 1 0 0 0 0
0 0 0 0 0 1 0 0
0 0 1 0 0 0 0 0
```