```
#include <iostream>
#include <vector>
using namespace std;
const int N = 8;
bool isSafe(vector<vector<int>>& board, int row, int col)
{
      for (int x = 0; x < col; x++)
             if (board[row][x] == 1)
                   return false;
      for (int x = row, y = col; x >= 0 && y >= 0; x--, y--)
             if (board[x][y] == 1)
                   return false;
      for (int x = row, y = col; x < N && y >= 0; x++, y--)
             if (board[x][y] == 1)
                   return false;
      return true;
}
bool solveNQueens(vector<vector<int>>& board, int col)
{
      if (col == N) {
             for (int i = 0; i < N; i++) {
                   for (int j = 0; j < N; j++)
                          cout << board[i][j] << " ";
                   cout << endl;
```

```
cout << endl;</pre>
             return true;
      for (int i = 0; i < N; i++) {
             if (isSafe(board, i, col)) {
                    board[i][col] = 1;
                    if (solveNQueens(board, col + 1))
                           return true;
                    board[i][col] = 0;
             }
      return false;
}
int main()
      vector<vector<int>> board(N, vector<int>(N, 0));
      if (!solveNQueens(board, 0))
             cout << "No solution found";</pre>
      return 0;
}
```

Output:- $1\ 0\ 0\ 0\ 0\ 0\ 0$ $0\,0\,0\,0\,0\,0\,1\,0$ $0\ 0\ 0\ 0\ 1\ 0\ 0\ 0$ $0\ 0\ 0\ 0\ 0\ 0\ 0\ 1$ $0\ 1\ 0\ 0\ 0\ 0\ 0\ 0$ $0\ 0\ 0\ 1\ 0\ 0\ 0\ 0$ $0\,0\,0\,0\,0\,1\,0\,0$ $0\ 0\ 1\ 0\ 0\ 0\ 0\ 0$