#include <iostream>

using namespace std;

bool safe (int \*\*arr, int x, int y, int n)

{

for (int i = 0; i < x; i++)

{

if (arr[i][y] == 1)

{

return false;

}

}

int row = x;

int col = y;

while (row >= 0 && col >= 0)

{

if (arr[row][col] == 1)

{

return false;

}

row--;

col--;

}

row = x;

col = y;

while (row >= 0 && col < n)

{

if (arr[row][col] == 1)

{

return false;

}

row--;

col++;

}

return true;

}

bool nqueen (int \*\*arr, int x, int n)

{

if (x >= n)

{

return true;

}

for (int col = 0; col < n; col++)

{

if (safe (arr, x, col, n))

{

arr[x][col] = 1;

if (nqueen (arr, x + 1, n))

{

return true;

}

arr[x][col] = 0;

}

}

return false;

}

int

main ()

{

int n;

cout<<" enter the size of matrix:";

cin>>n;

int \*\* arr=new int \*[n];

for(int i=0;i<n;i++){

arr[i]=new int[n];

for(int j=0;j<n;j++){

arr[i][j]=0;

}

}

cout<<" enter 0 row place:";

int r;

cin>>r;

cout<<" 0 col:";

int c;

cin>>c;

arr[r][c]=1;

if(nqueen(arr,1,n)){

for(int i=0;i<n;i++){

for(int j=0;j<n;j++){

cout<<arr[i][j]<<" ";

}

cout<<endl;

}

}

return 0;

}