#include<bits/stdc++.h>

using namespace std;

bool safe(vector<vector<int>> &arr, int row, int col, int n){

//check for same row

for(int i=row-1;i>=0;i--){

if(arr[i][col]==1){

return false;

}

}

// check for diagonal element

for(int i=row-1,j=col-1;i>=0 && j>=0;i--,j--){

if(arr[i][j]==1){

return false;

}

}

for(int i=row-1,j=col+1;i>=0 && j<n;i--,j++){

if(arr[i][j]==1){

return false;

}

}

return true;

}

void N\_queen(vector<vector<int>> &arr, int n, int row, string ans){

if(row==n){

cout<<ans<<"."<<endl;

return;

}

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

if(safe(arr,row,col,n)){

arr[row][col] = 1;

string r = to\_string(row);

string c = to\_string(col);

N\_queen(arr,n,row+1,ans+r+"-"+c+", ");

arr[row][col] = 0;

}

}

}

int main() {

int n;

cin >> n;

vector<vector<int>> arr(n,vector<int> (n));

N\_queen(arr,n,0,"");

}