//sudokusolve.cpp

#include <iostream>

using namespace std;

int arr[][9] = {{5,3,0,0,7,0,0,0,0},

{6,0,0,1,9,5,0,0,0},

{0,9,8,0,0,0,0,6,0},

{8,0,0,0,6,0,0,0,3},

{4,0,0,8,0,3,0,0,1},

{7,0,0,0,2,0,0,0,6},

{0,6,0,0,0,0,2,8,0},

{0,0,0,4,1,9,0,0,5},

{0,0,0,0,8,0,0,7,9}};

bool possible(int y, int x, int n)

{

for(int i=0; i<9; i++)

{

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

return false;

}//for

for(int i=0; i<9; i++)

{

if(arr[i][x]==n)

return false;

}//for

int x0 = (x/3) \* 3;

int y0 = (y/3)\*3;

for(int i=0; i<3; i++)

for(int j=0; j<3; j++)

if(arr[y0+i][x0+j]==n)

return false;

return true;

}

void solve(void)

{

for(int y=0; y<9; y++)

for(int x=0; x<9; x++)

if(arr[y][x]==0)

{

for(int n = 1; n<10; n++)

{

if(possible(y, x, n))

{

arr[y][x]=n;

solve();

arr[y][x]=0;

}//if

}//for

return;

}//if

//Anzeigen:

for(int y=0; y<9; y++)

{

for(int x=0; x<9; x++)

cout << arr[y][x];

cout << "\n";

}

cout << "\n";

}//Funktion

int main(void)

{

solve();

return 0;

}