//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;

}