//TIC-TAC TOE GAME

import java.util.Scanner;

class tic

{

public static void main(String[] args)

{

System.out.print('\u000C');

boolean flag= true;

boolean winner=true;

Scanner input= new Scanner(System.in);

String[][] a= new String[3][3];

initialize(a);

print\_matrix(a);

int count=0;

while(winner && count<=9 )

{

if(flag==true)

{

System.out.println("enter the coordinates");

int x= input.nextInt();

int y=input.nextInt();

if(0<=x && x<=2 && 0<=y && y<=2 )

{

a[x][y]= "X ";

count++;

print\_matrix(a);

if(count==9)

{

System.out.println("game over, please start again");

break;

}

if(x==1)

{

if((a[1][1]==a[0][1] && a[1][1]==a[2][1]) ||

(a[1][1]==a[0][0] && a[1][1]==a[2][2]) ||

(a[1][1]==a[0][2] && a[1][1]==a[2][0]) ||

(a[1][1]==a[1][0] && a[1][1]==a[1][2]) ||

(a[1][0]==a[0][0] && a[1][0]==a[2][0]) ||

(a[1][0]==a[1][1] && a[1][0]==a[1][2]) ||

(a[1][2]==a[0][2] && a[1][2]==a[2][2]) ||

(a[1][2]==a[1][0] && a[1][2]==a[1][1]))

{

System.out.println("game over");

System.out.println("winner is player X");

winner=false;

}

}

if(x==0)

{

if((a[0][0]==a[1][1] && a[0][0]==a[2][2])||

(a[0][0]==a[1][0] && a[0][0]==a[2][0]) ||

(a[0][0]==a[0][1] && a[0][0]==a[0][2]) ||

(a[0][1]==a[0][0] && a[0][1]==a[0][2]) ||

(a[0][1]==a[1][1] && a[0][1]==a[2][1]) ||

(a[0][2]==a[0][0] && a[0][2]==a[0][1]) ||

(a[0][2]==a[1][2] && a[0][2]==a[2][2]) ||

(a[0][2]==a[1][1] && a[0][2]==a[2][0]))

{

System.out.println("game over");

System.out.println("winner is player X");

winner=false;

}

}

if(x==2)

{

if((a[2][2]==a[1][1] && a[2][2]==a[0][0])||

(a[2][2]==a[1][2] && a[2][2]==a[0][2]) ||

(a[2][2]==a[2][1] && a[2][2]==a[2][0]) ||

(a[2][1]==a[1][1] && a[2][1]==a[0][1])||

(a[2][1]==a[2][0] && a[2][1]==a[2][2]) ||

(a[2][0]==a[1][0] && a[2][0]==a[0][0])||

(a[2][0]==a[2][1] && a[2][0]==a[2][2])||

(a[2][0]==a[1][1] && a[2][0]==a[0][2]))

{

System.out.println("game over");

System.out.println("winner is player X");

winner=false;

}

}

}

else

{

System.out.println("Try Again: please be in range from 0 to 2 inclusive");

x=input.nextInt();

y=input.nextInt();

a[x][y]="X ";

print\_matrix(a);

}

flag=false;

}

else if(flag==false)

{

System.out.println("enter the coordinates");

int x= input.nextInt();

int y=input.nextInt();

if(0<=x && x<=2 && 0<=y && y<=2 )

{

a[x][y]= "O ";

count++;

print\_matrix(a);

if(count==9)

{

System.out.println("game over, please start again");

break;

}

if(x==1)

{

if((a[1][1]==a[0][1] && a[1][1]==a[2][1]) ||

(a[1][1]==a[0][0] && a[1][1]==a[2][2]) ||

(a[1][1]==a[0][2] && a[1][1]==a[2][0]) ||

(a[1][1]==a[1][0] && a[1][1]==a[1][2]) ||

(a[1][0]==a[0][0] && a[1][0]==a[2][0]) ||

(a[1][0]==a[1][1] && a[1][0]==a[1][2]) ||

(a[1][2]==a[0][2] && a[1][2]==a[2][2]) ||

(a[1][2]==a[1][0] && a[1][2]==a[1][1]))

{

System.out.println("game over");

System.out.println("winner is player O");

winner=false;

}

}

if(x==0)

{

if((a[0][0]==a[1][1] && a[0][0]==a[2][2])||

(a[0][0]==a[1][0] && a[0][0]==a[2][0]) ||

(a[0][0]==a[0][1] && a[0][0]==a[0][2]) ||

(a[0][1]==a[0][0] && a[0][1]==a[0][2]) ||

(a[0][1]==a[1][1] && a[0][1]==a[2][1]) ||

(a[0][2]==a[0][0] && a[0][2]==a[0][1]) ||

(a[0][2]==a[1][2] && a[0][2]==a[2][2]) ||

(a[0][2]==a[1][1] && a[0][2]==a[2][0]))

{

System.out.println("game over");

System.out.println("winner is player O");

winner=false;

}

}

if(x==2)

{

if((a[2][2]==a[1][1] && a[2][2]==a[0][0])||

(a[2][2]==a[1][2] && a[2][2]==a[0][2]) ||

(a[2][2]==a[2][1] && a[2][2]==a[2][0]) ||

(a[2][1]==a[1][1] && a[2][1]==a[0][1])||

(a[2][1]==a[2][0] && a[2][1]==a[2][2]) ||

(a[2][0]==a[1][0] && a[2][0]==a[0][0])||

(a[2][0]==a[2][1] && a[2][0]==a[2][2])||

(a[2][0]==a[1][1] && a[2][0]==a[0][2]))

{

System.out.println("game over");

System.out.println("winner is player O");

winner=false;

}

}

}

else

{

System.out.println("Try Again: please be in range from 0 to 2 inclusive");

x=input.nextInt();

y=input.nextInt();

a[x][y]="O ";

print\_matrix(a);

}

flag=true;

}

}

}

public static void print\_matrix(String[][] a)

{

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

{

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

{

System.out.print(a[i][j]);

}

System.out.println();

}

}

public static void initialize(String[][] a)

{

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

{

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

{

String s="\_ ";

s=s+" ";

a[i][j]=s;

}

System.out.println();

}

}

}