#include <iostream>

using namespace std;

char s;

int q=0;

char grid[5][5];

int reenter()

{

int b;

cout<<endl<<"The entered number is already chosen,please choose another : ";

cin>>b;

return b;

}

void putg(int a)

{

if(a==1)

{

if(grid[0][0]==' ')

{

grid[0][0]=s;

}

else

{

putg(reenter());

}

}

else if(a==2)

{

if(grid[0][2]==' ')

{

grid[0][2]=s;

}

else

{

putg(reenter());

}

}

else if(a==3)

{

if(grid[0][4]==' ')

{

grid[0][4]=s;

}

else

{

putg(reenter());

}

}

else if(a==4)

{

if(grid[2][0]==' ')

{

grid[2][0]=s;

}

else

{

putg(reenter());

}

}

else if(a==5)

{

if(grid[2][2]==' ')

{

grid[2][2]=s;

}

else

{

putg(reenter());

}

}

else if(a==6)

{

if(grid[2][4]==' ')

{

grid[2][4]=s;

}

else

{

putg(reenter());

}

}

else if(a==7)

{

if(grid[4][0]==' ')

{

grid[4][0]=s;

}

else

{

putg(reenter());

}

}

else if(a==8)

{

if(grid[4][2]==' ')

{

grid[4][2]=s;

}

else

{

putg(reenter());

}

}

else if(a==9)

{

if(grid[4][4]==' ')

{

grid[4][4]=s;

}

else

{

putg(reenter());

}

}

else

{

int b;

cout<<"The enterd number is invalid,please enter another number : ";

cin>>b;

putg(b);

}

}

void display()

{

for(int i=0;i<5;i++)

{

cout<<"\t";

for(int j=0;j<5;j++)

{

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

}

cout<<endl;

}

}

int check(int \*ptr)

{

//cout<<grid[2][2];

//cout<<grid[0][0];

for(int i=0;i<5;i+=2)

{

char a;

int count=0;

for(int j=0;j<5;j+=2)

{

if(grid[i][j]=='x'||grid[i][j]=='o')

{

a=grid[i][j];

break;

}

}

for(int j=0;j<5;j+=2)

{

//cout<<"a is "<<a;

//cout<<" grid is "<<grid[i][j];

if(a==grid[i][j])

{

//cout<<"i,j"<<i<<" "<<j<<" "<<grid[i][j];

count+=1;

//cout<<count<<endl;

}

}

if(count==3)

{

\*ptr=1;

return \*ptr;

break;

}

}

for(int j=0;j<5;j+=2)

{

char a1;

int count1=0;

for(int i=0;i<5;i+=2)

{

if(grid[i][j]=='x'||grid[i][j]=='o')

{

a1=grid[i][j];

break;

}

}

for(int i=0;i<5;i+=2)

{

//cout<<"a is "<<a;

//cout<<" grid is "<<grid[i][j];

if(a1==grid[i][j])

{

//cout<<"i,j"<<i<<" "<<j<<" "<<grid[i][j];

count1+=1;

//cout<<count<<endl;

}

}

if(count1==3)

{

\*ptr=1;

return \*ptr;

break;

}

}

char a2=grid[2][2];

if(a2!=' ')

{

if(grid[0][0]==a2&&grid[4][4]==a2)

{

\*ptr=1;

return \*ptr;

}

if(grid[0][4]==a2&&grid[4][0]==a2)

{

\*ptr=1;

return \*ptr;

}

}

return 0;

}

int main()

{

string name1,name2;

cout<<"Enter Player 1 name : ";

getline(cin,name1);

cout<<"Enter Player 2 name : ";

getline(cin,name2);

int move;

int strike;

int \*ptr,\*ptr1;

ptr=&strike;

for(int i=0;i<5;i++)

{

for(int j=0;j<5;j++)

{

grid[i][j]=' ';

}

}

for(int i=1;i<5;i+=2)

{

for(int j=0;j<5;j+=1)

{

grid[i][j]='-';

}

}

for(int j=1;j<5;j+=2)

{

for(int i=0;i<5;i+=1)

{

grid[i][j]='|';

}

}

for(int i=0;i<5;i+=1)

{

cout<<name1<<"'s turn : ";

s='x';

cin>>move;

putg(move);

check(ptr);

if(\*ptr==1)

{

cout<<endl<<name1<<" wins"<<endl;

q=1;

break;

}

display();

cout<<endl;

if(i==4)

{

break;

}

cout<<name2<<" 's turn : ";

s='o';

cin>>move;

putg(move);

check(ptr);

if(\*ptr==1)

{

cout<<endl<<name2<<" wins"<<endl;

q=1;

break;

}

display();

cout<<endl;

}

if(q==0)

{

cout<<"It's a tie"<<endl;

}

cout<<endl;

display();

}