#include<iostream>

#include<conio.h>

using namespace std;

struct Student

{

bool resource\_pen;

bool resource\_paper;

bool resource\_question\_paper;

bool resource\_all\_resources;

}s1,s2,s3;

void student\_process\_one()

{

s1.resource\_all\_resources=1;

s1.resource\_paper=1;

s1.resource\_question\_paper=1;

cout<<"Student Process One Completed"<<endl;

}

void student\_process\_two()

{

s2.resource\_all\_resources=1;

s2.resource\_pen=1;

s2.resource\_question\_paper=1;

cout<<"Student Process Two Completed"<<endl;

}

void student\_process\_three()

{

s3.resource\_all\_resources=1;

s3.resource\_pen=1;

s3.resource\_paper=1;

cout<<"Student Process Three Completed"<<endl;

}

int main()

{

s1.resource\_all\_resources=0;s1.resource\_paper=0;s1.resource\_pen=0;s1.resource\_question\_paper=0;

s2.resource\_all\_resources=0;s2.resource\_paper=0;s2.resource\_pen=0;s2.resource\_question\_paper=0;

s3.resource\_all\_resources=0;s3.resource\_paper=0;s3.resource\_pen=0;s3.resource\_question\_paper=0;

do

{

int a,b;

cout<<"1.Pen"<<endl;

cout<<"2.Paper"<<endl;

cout<<"3.Question Paper"<<endl;

cout<<"Select any two items to be placed on the shared table:"<<endl;

cin>>a>>b;

if(a==1 && b==2 && s3.resource\_all\_resources==0)

{

student\_process\_three();

}

if(a==2 && b==1 && s3.resource\_all\_resources==0)

{

student\_process\_three();

}

if(a==2 && b==3 && s1.resource\_all\_resources==0)

{

student\_process\_one();

}

if(a==3 && b==2 && s1.resource\_all\_resources==0)

{

student\_process\_one();

}

if(a==1 && b==3 && s2.resource\_all\_resources==0)

{

student\_process\_two();

}

if(a==3 && b==1 && s2.resource\_all\_resources==0)

{

student\_process\_two();

}

}

while(s1.resource\_all\_resources==0||s2.resource\_all\_resources==0||s3.resource\_all\_resources==0);

cout<<"All Student Processes Completed";

getch();

}