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Lớp : 217JAVA101

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```
/*
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 */

package phanso1;

import java.util.Scanner;

/**
 *
 * @author Phan Ngoc Hung
 */
public class PhanSo1 {
    int tu; int mau;
    PhanSo1(){ tu =0; mau = 1;}
    PhanSo1(PhanSo1 p){
        this.tu=p.tu;
        this.mau=p.mau;
    }
    PhanSo1 Nhapgt(){
        Scanner sc = new Scanner(System.in);
        System.out.print(" nhap tu so = ");
        tu = sc.nextInt();
        System.out.print(" nhap mau so = ");
        mau = sc.nextInt();
    }
}
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        return this;
    }
    static void XuatPS(PhanSo1 ps){
        if(ps.mau==1)
            System.out.print(ps.tu);
        else
            System.out.println(+ps.tu+"/"+ps.mau);
    }
    static int USCLN(int a, int b){
        if(a<0)
            a=-a;
        if(b<0)
            b=-b;
        while(a!=b)
        {
            if(a>b)
                a=a-b;
            else
                b=b-a;
        }
        return a+b;
    }
    public PhanSo1 Simplify(PhanSo1 ps){
        int usc = USCLN(ps.tu,ps.mau);
        ps.tu=ps.tu/usc; ps.mau=ps.mau/usc;
        return ps;
    }
    public PhanSo1 Congps(PhanSo1 p1, PhanSo1 p2){
        PhanSo1 p3 = new PhanSo1();

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        p3.tu=(p1.tu*p2.mau)+(p1.mau*p2.tu);
        p3.mau=p1.mau*p2.mau;
        p3=p3.Simplify(p3);
        return p3;
    }

    public PhanSo1 Trups(PhanSo1 p1, PhanSo1 p2){
        PhanSo1 p3 = new PhanSo1();
        p3.tu=(p1.tu*p2.mau)-(p1.mau*p2.tu);
        p3.mau=p1.mau*p2.mau;
        p3=p3.Simplify(p3);
        return p3;
    }

    public PhanSo1 Nhanps(PhanSo1 p1, PhanSo1 p2){
        PhanSo1 p3 = new PhanSo1();
        p3.tu=p1.tu*p2.tu;
        p3.mau=p1.mau*p2.mau;
        p3=p3.Simplify(p3);
        return p3;
    }

    public PhanSo1 Chiaps(PhanSo1 p1, PhanSo1 p2){
        PhanSo1 p3 = new PhanSo1();
        p3.tu=p1.tu*p2.mau;
        p3.mau=p1.mau*p2.tu;
        p3=p3.Simplify(p3);
        return p3;
    }

    public static void main(String[] args) {
        PhanSo1 ps1= new PhanSo1();
        PhanSo1 ps2= new PhanSo1();

```

```
PhanSo1 ps3= new PhanSo1();
System.out.println("Nhap phan so thu nhat");
ps1.Nhapgt();
System.out.print("Nhap phan so thu 2");
ps2.Nhapgt();
System.out.print(" Phan so thu 1 = ");
PhanSo1.XuatPS(ps1);
System.out.print(" Phan so thu 2 = ");
PhanSo1.XuatPS(ps2);
System.out.print(" Tong 2 phan so = ");
ps3= ps3.Congps(ps1, ps2);
ps3.XuatPS(ps3);
System.out.print(" Tru 2 phan so = ");
ps3= ps3.Trups(ps1, ps2);
ps3.XuatPS(ps3);
System.out.print(" Tich 2 phan so = ");
ps3= ps3.Nhanps(ps1, ps2);
ps3.XuatPS(ps3);
System.out.print(" Thuong 2 phan so = ");
ps3= ps3.Chiaps(ps1, ps2);
ps3.XuatPS(ps3);

}
```

```
run:
Nhap phan so thu nhat
  nhap tu so = 1
  nhap mau so = 2
Nhap phan so thu 2 nhap tu so = 3
  nhap mau so = 4
Phan so thu 1 = 1/2
Phan so thu 2 = 3/4
Tong 2 phan so = 2/2
Tru 2 phan so = 0/2
Tich 2 phan so = 1/4
Thuong 2 phan so = 1BUILD SUCCESSFUL (total time: 5 seconds)
|
}
```

Kết quả