**import** java.math.BigInteger;

**import** java.util.Random;

**public** **class** PP {

**public** **static** **void** main(String[] args) {

BigInteger i,b,m,lunci,v,w,z,f,u;

BigInteger c=**new** BigInteger("2");

BigInteger d=**new** BigInteger("0");

BigInteger e=**new** BigInteger("1");

lunci=**new** BigInteger("2");

BigInteger a=**new** BigInteger("121");

**if** (a.compareTo(c)<0){System.*out*.println("bushi1");

System.*exit*(0);}

**if** (!a.equals(c) & a.mod(c).equals(d)){System.*out*.println("bushi2");

System.*exit*(0);}

m=a.subtract(e);

**while** (m.mod(c).equals(d)){m=m.divide(c);}

**for** ( i = **new** BigInteger("0"); i.compareTo(lunci) < 0; i = i.add(**new** BigInteger("1")))

{b= **new** BigInteger (2000, **new** Random());

w=m;

z=m;

BigInteger q1=**new** BigInteger("1");

BigInteger p1=b;

**while**(w.compareTo(d)>0){

**if** (w.mod(c).equals(e))

q1=q1.multiply(p1);

q1=q1.mod(a);

p1=p1.multiply(p1);

p1=p1.mod(a);

w=w.divide(c);

}

v=q1.mod(a);

**while** (!a.subtract(e).equals(z)&& !v.equals(e) && !a.subtract(e).equals(v) )

{

BigInteger q2=d;

BigInteger p2=v.mod(a);

f=v;

**while** (f.compareTo(d)>0){

**if** (f.mod(c).equals(e))

{q2=q2.add(p2);

q2=q2.mod(a);}

p2=p2.multiply(c);

p2=p2.mod(a);

f=f.divide(c);}

u=q2.mod(a);

z=z.multiply(c);

}

**if** ( !a.subtract(e).equals(u)& z.mod(c).equals(d) ) /\*u没有定义？在循环里u=q2.mod(a)已经定义了啊\*/

{System.*out*.println("bushi3");

System.*exit*(0);}}

System.*out*.println("shi");

}}