#include<iostream>  
using namespace std;  
struct fractie  
{  
int numarator;  
int numitor;  
};  
  
int f1(fractie a)  
{  
if(a.numitor==0)  
return 0;  
else  
return 1;  
}  
  
fractie f2(fractie a, fractie b, char o)  
{  
int aux;  
switch (o)  
{  
case '+':  
if(a.numitor!=b.numitor)  
{  
aux=a.numitor;  
a.numitor\*=b.numitor;  
a.numarator=a.numarator\*b.numitor+b.numarator\*aux;  
}  
else  
a.numarator+=b.numarator;  
break;  
  
case '-':  
if(a.numitor!=b.numitor)  
{  
aux=a.numitor;  
a.numitor\*=b.numitor;  
a.numarator=a.numarator\*b.numitor-b.numarator\*aux;  
}  
else  
a.numarator-=b.numarator;  
break;  
  
case '\*':  
a.numarator\*=b.numarator;  
a.numitor\*=b.numitor;  
break;  
  
case '/':  
a.numarator\*=b.numitor;  
a.numitor\*=b.numarator;  
break;  
  
default:  
cout<<"operatia nu se poate efectua"<<endl;  
return {0,0};  
}  
return a;  
}  
  
fractie f3(fractie a)  
{  
fractie n;  
n=a;  
while(n.numitor!=n.numarator)  
{  
if(n.numarator>n.numitor)  
n.numarator-=n.numitor;  
else  
n.numitor-=n.numarator;  
  
}  
a.numarator/=n.numarator;  
a.numitor/=n.numitor;  
return a;  
  
}  
  
int main()  
{  
fractie a, b, r;  
char o;  
cout<<"prima fractie:";  
cin>>a.numarator;  
cout<<'/';  
cin>>a.numitor;  
cout<<"a doua fractie:";  
cin>>b.numarator;  
cout<<'/';  
cin>>b.numitor;  
if((f1(a)==0)||(f1(b)==0))  
{  
cout<<"numitor 0"<<endl;  
return 0;  
}  
cout<<"operatia:";  
cin>>o;  
r=f2(a,b,o);  
r=f3(r);  
cout<<r.numarator<<'/'<<r.numitor<<endl;  
return 0;  
}