#include <iostream>

using namespace std;

class ring

{

protected:

double mass;

string name;

double prob;

public:

void init(string n, double p, double m);

void print();

double ProbtoMas();

};

class signet : public ring

{

private:

double massstone;

string namestone;

public:

void init(string n, double p, double m, double masss, string names);

void print();

double fullmass();

};

void ring::init(string n, double p, double m)

{

mass = m;

name = n;

prob = p;

}

void ring::print()

{

cout << "Name = " << name << endl;

cout << "Mass = " << mass << endl;

cout << "Mass of jewel = " << ProbtoMas() << endl;

cout << "Prob = " << prob << endl;

}

double ring::ProbtoMas()

{

return (prob\*mass\*1.0)/10000;

}

void signet::init(string n, double p, double m, double masss, string names)

{

ring::init(n, p, m);

massstone = masss;

namestone = names;

}

void signet::print()

{

ring::print();

cout << "Name of stone = " << namestone << endl;

cout << "Mass of stone = " << massstone << endl;

cout << "Full mass = " << fullmass() << endl;

}

double signet::fullmass()

{

return mass + massstone;

}

int main()

{

signet signet1;

string name,name1;

cout << "Input name: ";

cin >> name1;

cout << "Input name of stone: ";

cin >> name;

double prob,mass,mass1;

cout << "Input prob: ";

cin >> prob;

cout << "Input mass: ";

cin >> mass1;

cout << "Input mass of stone: ";

cin >> mass;

signet1.init(name1, prob, mass1, mass, name);

cout << "\n\n";

signet1.print();

return 0;

}