**Write a program that can convert the Distance (meter, centimeter) to meters measurement in float and vice versa. Make a class distance with two data members, meter and centimeter. You can add function members as per your requirement.**

**#include <iostream>**

**#define SUCCESS 0**

**using namespace std;**

**class Distance{**

**int meter;**

**int centimeter;**

**public:**

**Distance(int m,int cm):meter(m),centimeter(cm){};**

**Distance(float no)**

**{**

**meter=no;**

**centimeter=(no-int(no))\*100;**

**}**

**operator float()**

**{**

**return float(meter) + float(centimeter)/100.0;**

**}**

**Distance operator+(Distance a)**

**{**

**return Distance(meter+a.meter+(centimeter+a.centimeter)/100,(centimeter+a.centimeter)%100);**

**}**

**void display()**

**{**

**cout << meter << " m " << centimeter << "cm" << endl;**

**}**

**};**

**int main()**

**{**

**Distance d(10.34);**

**d.display();**

**cout << "Distance typecasting to float ";**

**cout << d << endl;**

**Distance c(10,6);**

**Distance s = d+c;**

**cout << "addition of two distances" << endl;**

**d.display();**

**c.display();**

**cout << "Gives";**

**s.display();**

**return SUCCESS;**

**}**

**#include<iostream>//or**

**using namespace std;**

**class distanc**

**{**

**float meter ,centimeter;**

**public:**

**distanc(float m,float cm)**

**{**

**meter=m;**

**centimeter=cm;**

**}**

**distanc(float m)**

**{**

**meter=m;**

**centimeter=0;**

**}**

**operator float()**

**{**

**return (meter+(centimeter/100));**

**}**

**void display()**

**{**

**int m;**

**float c;**

**m=static\_cast<int>(meter);**

**c=(meter-m)\*100;**

**cout<<m<<" meter , "<<c<<" centimeter"<<endl;**

**}**

**};**

**int main()**

**{**

**distanc d1(2.1,56.5),d2(.563);**

**float disp;**

**d2.display();**

**disp=d1;**

**cout<<"meter = "<<d1;**

**}**