

```

#include <iostream>
using namespace std;

class Distance
{
private:
    int feet, inches;
public:
    Distance()
    {
        feet = 0;
        inches = 0;
    }
    Distance(int ft, int in)
    {
        feet = ft;
        inches = in;
    }
    friend ostream &operator<<(ostream &output, Distance &D);
    friend istream &operator>>(istream &input, Distance &D);
    // your code
};

// your code

ostream &operator<<( ostream &output, Distance &D )
{
    output << "Feet: " << D.feet << " Inches: " << D.inches << endl;
    return output;
}

istream &operator>>( istream &input, Distance &D )
{
    cout << "Enter feet and inches: ";
    input >> D.feet >> D.inches;
    return input;
}

int main()
{
    Distance d1, d2, d3, d4, d5, d6;
    cin >> d1;           // take input for feet and inches of d1
    cin >> d2;           // take input for feet and inches of d2
    cout << d1;          // output feet and inches of d1
    cout << d2;          // output feet and inches of d2
    d3 = d1 + d2;        // d3 is the sum of d1 and d2
    cout << d3;          // output feet and inches of d3
    d4 = d1 + d2 + d3;   // d4 is the sum of d1, d2, and d3
    cout << d4;          // output feet and inches of d4
    d5 = d1 + 3;         // d5 is d1 plus 3 inches
    cout << d5;          // output feet and inches of d5
    d6 = 4 + d1;         // d6 is d1 plus 4 feet
    cout << d6;          // output feet and inches of d6
    if(d1 < d2)          // compare d1 and d2
        cout << "d1 is less than d2" << endl;
    else
        cout << "d1 is greater than (or equal to) d2" << endl;
    d1+=d2;              // d1 is d1 plus d2
    cout << d1;          // output feet and inches of d1
    return 0;
}

/* sample output
Enter feet and inches: 12 5
Enter feet and inches: 11 6
Feet: 12 Inches: 5
Feet: 11 Inches: 6
Feet: 23 Inches: 11

```

Feet: 47 Inches: 10

Feet: 12 Inches: 8

Feet: 16 Inches: 5

d1 is greater than (or equal to) d2

*/