

```

1  #include<iostream>
2  using namespace std;
3
4  class CDemo
5  {
6      int m_iNo1;
7      int m_iNo2;
8
9      public:
10     CDemo(int iNo1 = 10, int iNo2 = 20)
11     {
12         m_iNo1 = iNo1;
13         m_iNo2 = iNo2;
14     }
15
16     friend CDemo operator +(CDemo &, CDemo &);
17     friend CDemo operator -(CDemo &, CDemo &);
18     friend CDemo operator *(CDemo &, CDemo &);
19     friend CDemo operator /(CDemo &, CDemo &);
20     friend CDemo operator <<(CDemo &, CDemo &);
21     friend CDemo operator >>(CDemo &, CDemo &);
22     friend CDemo& operator +=(CDemo &, CDemo &);
23     friend bool operator ==(CDemo &, CDemo &);
24     friend bool operator <(CDemo &, CDemo &);
25     friend bool operator >(CDemo &, CDemo &);
26 };
27
28 CDemo operator +(CDemo &refObj1, CDemo &refObj2)
29 {
30     cout<<"In binary + operator\n\n";
31     return CDemo(refObj1.m_iNo1 + refObj2.m_iNo1, refObj1.m_iNo2 + refObj2.m_iNo2);
32 }
33
34 CDemo operator -(CDemo &refObj1, CDemo &refObj2)
35 {
36     cout<<"In binary - operator\n\n";
37     return CDemo(refObj1.m_iNo1 - refObj2.m_iNo1, refObj1.m_iNo2 - refObj2.m_iNo2);
38 }
39
40 CDemo operator *(CDemo &refObj1, CDemo &refObj2)
41 {
42     cout<<"In binary * operator\n\n";
43     return CDemo(refObj1.m_iNo1 * refObj2.m_iNo1, refObj1.m_iNo2 * refObj2.m_iNo2);
44 }
45
46 CDemo operator /(CDemo &refObj1, CDemo &refObj2)
47 {
48     cout<<"In binary / operator\n\n";
49     return CDemo(refObj1.m_iNo1 / refObj2.m_iNo1, refObj1.m_iNo2 / refObj2.m_iNo2);
50 }
51
52 CDemo operator <<(CDemo &refObj1, CDemo &refObj2)
53 {
54     cout<<"In binary << operator\n\n";
55     return CDemo(refObj1.m_iNo1 << refObj2.m_iNo1, refObj1.m_iNo2 << refObj2.m_iNo2);
56 }
57
58 CDemo operator >>(CDemo &refObj1, CDemo &refObj2)
59 {
60     cout<<"In binary >> operator\n\n";
61     return CDemo(refObj1.m_iNo1 >> refObj2.m_iNo1, refObj1.m_iNo2 >> refObj2.m_iNo2);
62 }
63
64 CDemo& operator +=(CDemo &refObj1, CDemo &refObj2)
65 {
66     cout<<"In binary += operator\n\n";
67     refObj1.m_iNo1 += refObj2.m_iNo1;

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68     refObj1.m_iNo2 += refObj2.m_iNo2;
69     return refObj1;
70 }
71
72 bool operator ==(CDemo &refObj1, CDemo &refObj2)
73 {
74     cout<<"In binary == operator\n";
75     return ((refObj1.m_iNo1 == refObj2.m_iNo1) && (refObj1.m_iNo2 == refObj2.m_iNo2));
76 }
77
78 bool operator <(CDemo &refObj1, CDemo &refObj2)
79 {
80     cout<<"In binary < operator\n";
81     return ((refObj1.m_iNo1 < refObj2.m_iNo1) && (refObj1.m_iNo2 < refObj2.m_iNo2));
82 }
83
84 bool operator >(CDemo &refObj1, CDemo &refObj2)
85 {
86     cout<<"In binary > operator\n";
87     return ((refObj1.m_iNo1 > refObj2.m_iNo1) && (refObj1.m_iNo2 > refObj2.m_iNo2));
88 }
89
90 int main()
91 {
92
93     CDemo obj1, obj2, obj3;
94
95     obj3 = obj1 + obj2; // obj1 + obj2 => +(obj1, obj2);
96
97     obj3 = obj1 - obj2;
98
99     obj3 = obj1 * obj2;
100
101     obj3 = obj1 / obj2;
102
103     obj1 << obj2;
104
105     obj1 >> obj2;
106
107     obj2 += obj1;
108
109     if(obj1 == obj2)
110         cout<<"Both objects are equal\n\n"<<endl;
111     else
112         cout<<"Both objects are not equal\n\n"<<endl;
113
114     if(obj1 < obj2)
115         cout<<"obj1 is less than obj2\n\n"<<endl;
116     else
117         cout<<"obj1 is greater than obj2\n\n"<<endl;
118
119     if(obj1 > obj2)
120         cout<<"obj1 is greater than obj2\n\n"<<endl;
121     else
122         cout<<"obj1 is less than obj2\n\n"<<endl;
123
124     return 0;
125 }
126

```