```
Philip Pesic
Week 15
November 27 2022
Week 15 Prog 3
Add the ++ operator to the complex class and test.
//
// main.cpp
// Week 15 Prog 3
//
// Created by Pippo Pesic on 11/26/22.
//
#include <iostream>
using namespace std;
class Complex
       private:
       float real;
       float imag;
       public:
       Complex(): real(0), imag(0){}
       void input()
       {
```

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       cout<<"Enter real and imaginary parts respectively: ";</pre>
       cin>>real;
       cin>>imag;
       }
       Complex operator - (Complex c2) /* Operator Function */
       {
       Complex temp;
       temp.real=real-c2.real;
       temp.imag=imag-c2.imag;
       return temp;
       }
       Complex operator + (Complex a2) /* Operator Function */
       {
       Complex temp;
       temp.real=real+a2.real;
       temp.imag=imag+a2.imag;
       return temp;
       }
       Complex operator * (Complex m2) /* Operator Function */
       {
```

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      Complex temp;
      temp.real=real*m2.real;
      temp.imag=imag*m2.imag;
      return temp;
      }
      Complex operator / (Complex d2) /* Operator Function */
      {
      Complex temp;
      temp.real=real/d2.real;
      temp.imag=imag/d2.imag;
      return temp;
      }
      Complex operator ++ () /* Operator Function */
      {
      Complex temp;
      temp.real=real++;
      temp.imag=imag++;
      return temp;
      }
```

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       void output()
       {
       if(imag<0)
       cout<<"Output Complex number: "<<real<<imag<<"i" << endl;</pre>
       else
       cout<<"Output Complex number: "<<real<<"+"<<imag<<"i"<< endl;
       }
};
int main()
{
       Complex c1, c2, a1, a2, m1, m2, d1, d2, i1, i2, result;
       cout<<"Enter first complex number:\n";</pre>
       c1.input();
       cout<<"Enter second complex number:\n";</pre>
       c2.input();
       result=c1-c2; /* c2 is furnised as an argument to the operator function. */
       result.output();
       cout<<"Enter first complex number:\n";</pre>
       al.input();
```

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       cout<<"Enter second complex number:\n";</pre>
       a2.input();
       result=a1+a2; /* c2 is furnised as an argument to the operator function. */
       result.output();
       cout<<"Enter first complex number:\n";</pre>
       m1.input();
       cout<<"Enter second complex number:\n";</pre>
       m2.input();
       result=m1*m2; /* c2 is furnised as an argument to the operator function. */
       result.output();
       cout<<"Enter first complex number:\n";</pre>
       d1.input();
       cout<<"Enter second complex number:\n";</pre>
       d2.input();
       result=a1/d2; /* c2 is furnised as an argument to the operator function. */
       result.output();
       cout<<"Enter first complex number:\n";</pre>
       i1.input();
```

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cout<<"Enter second complex number:\n";

i2.input();

result=i1+i2; /* c2 is furnised as an argument to the operator function. */

result.output();

/* In case of operator overloading of binary operators in C++ programming, the object on right hand side of operator is always assumed as argument by compiler. */

cout << "Philip Pesic 11/27/22" << endl;

return 0;
}
```

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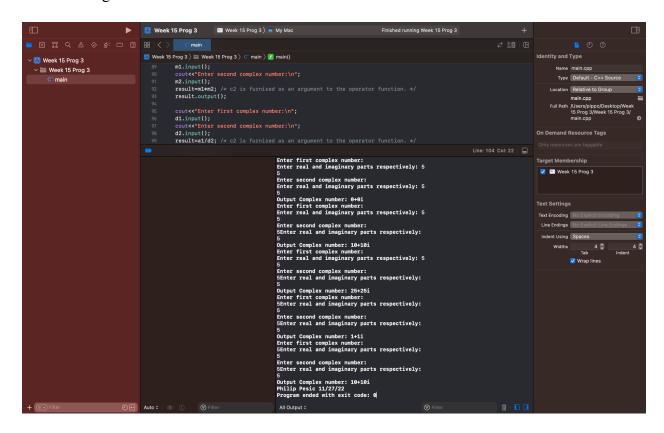
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31 Complex operator + (Complex a2) /* Operator Function */
36 return temp;
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15 Prog 3/Week 15 Prog 3/
main.cpp
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                                                                     Complex temp;
temp.real=real*m2.real;
temp.imag=imag*m2.imag;
return temp;
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temp.real=real/d2.real;
temp.imag=imag/d2.imag;
return temp;
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                                                                     Complex temp;
temp.real=real++;
temp.imag=imag++;
return temp;
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                                                               Complex c1, c2, a1, a2, m1, m2, d1, d2, i1, i2, result; cout<<pre>cout<</pre>cout<</pre>coutcinsu(1)
coutcinsu(1)
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coutc
insu(1)
result=c1-c2; /* c2 is furnised as an argument to the operator function. */
```

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I learned: how to use the ++ operator