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Write a program to implement constructor overloading

```
#include <iostream>
using namespace std;
class complex {
private:
   int x, y;

public:
   complex()
   {
   }
   complex(float a)
   {
      x = y = a;
   }
   complex(float real, float img)
   {
      x = real;
      y = img;
   }
   friend complex sum(complex, complex);
   friend void show(complex);
};
complex sum(complex c1, complex c2)
{
   complex c3;
   c3.x = c1.x + c2.x;
   c3.y = c1.y + c2.y;
   return (c3);
}
void show(complex d)
{
   cout << d.x << "+I" << d.y << endl;
}
int main()
{
   complex A(10.8);
```

```
    complex B(30.6);
    complex result;
    result = sum(A, B);
    cout << "A=";
    show(A);
    cout << "B=";
    show(B);
    cout << "result=";
    show(result);
    return (0);
}
```

Output

```
A=10.8+i4,8
B=30.6+i5.6
result=41.4+i10.4
```