

EXAMPLE 1: DEFINE A REALLY SIMPLE C++ CLASS

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LET'S CREATE A LITTLE CLASS TO HOLD A **COMPLEX
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```
class ComplexNumber
```

```
{  
    private:  
        float realPart;  
        float complexPart;  
    public:  
        ComplexNumber()  
        {  
            cout << "No arg-constructor called" << endl;  
        }  
        void setMemberVariables(double r, double c)  
        {  
            realPart = r;  
            complexPart = c;  
        }  
        float getRealPart()  
        {  
            return realPart;  
        }  
  
        float getComplexPart()  
        {  
            return complexPart;  
        }  
        void print()  
        {  
            cout << "real = " << realPart << " complex = " << complexPart;  
        }  
};
```

THE KEYWORD **class**, FOLLOWED
BY THE NAME OF THE CLASS

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    ComplexNumber()
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    void setMemberVariables(double r, double c)
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        realPart = r;
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        complexPart = c;
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```
}
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```
    float getRealPart()
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        return realPart;
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    float getComplexPart()
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```
    void print()
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```
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```

```
        cout << "real = " << realPart << " complex = " << complexPart;
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```
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THE BODY ENCLOSED
WITHIN CURLY BRACES

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**DON'T FORGET THE SEMI-COLON
AFTER THE CLOSING BRACE!**

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WITHIN THE BODY, SOME
DATA (MEMBER VARIABLES)

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ALSO WITHIN THE BODY, SOME FUNCTIONS
(MEMBER FUNCTIONS, ALSO CALLED METHODS)

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```

A SECTION MARKED **private** THAT
IS FOR MEMBER FUNCTIONS AND DATA
ACCESSIBLE ONLY INSIDE THE CLASS

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NOTE THE USE OF THE
KEYWORD `private`

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A SECTION MARKED **public** THAT IS
FOR MEMBER FUNCTIONS AND DATA
ACCESSIBLE TO CODE OUTSIDE THE
CLASS AS WELL

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KEYWORD **public**

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**A CONSTRUCTOR - WHICH
HAS THE SAME NAME AS
THE CLASS ITSELF**