

Cloud Computing

Midterm Exam Range

Date: October 22(Tue), 2019, 10:00 am

1) Read 4 chapters of C++ tutorial at tutorials point

Link: https://www.tutorialspoint.com/cplusplus/cpp_data_abstraction.htm

- C++ Classes & Objects
- C++ Inheritance
- C++ Overloading
- C++ Polymorphism

tutorialspoint.com/cplusplus/cpp_data_abstraction.htm

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C++ Strings

C++ Pointers

C++ References

C++ Date & Time

C++ Basic Input/Output

C++ Data Structures

C++ Object Oriented

- C++ Classes & Objects
- C++ Inheritance
- C++ Overloading
- C++ Polymorphism
- C++ Abstraction
- C++ Encapsulation
- C++ Interfaces

of class **ostream** to stream data to standard output like this –

```
#include <iostream>
using namespace std;

int main() {
    cout << "Hello C++" << endl;
    return 0;
}
```

Here, you don't need to understand how **cout** displays the text, you only know the public interface and the underlying implementation.

Access Labels Enforce Abstraction

In C++, we use access labels to define the abstract interface of a class or more access labels –

- Members defined with a public label are accessible to all. The abstraction view of a type is defined by its public members.
- Members defined with a private label are not accessible to all. Private sections hide the implementation from code that uses the class.

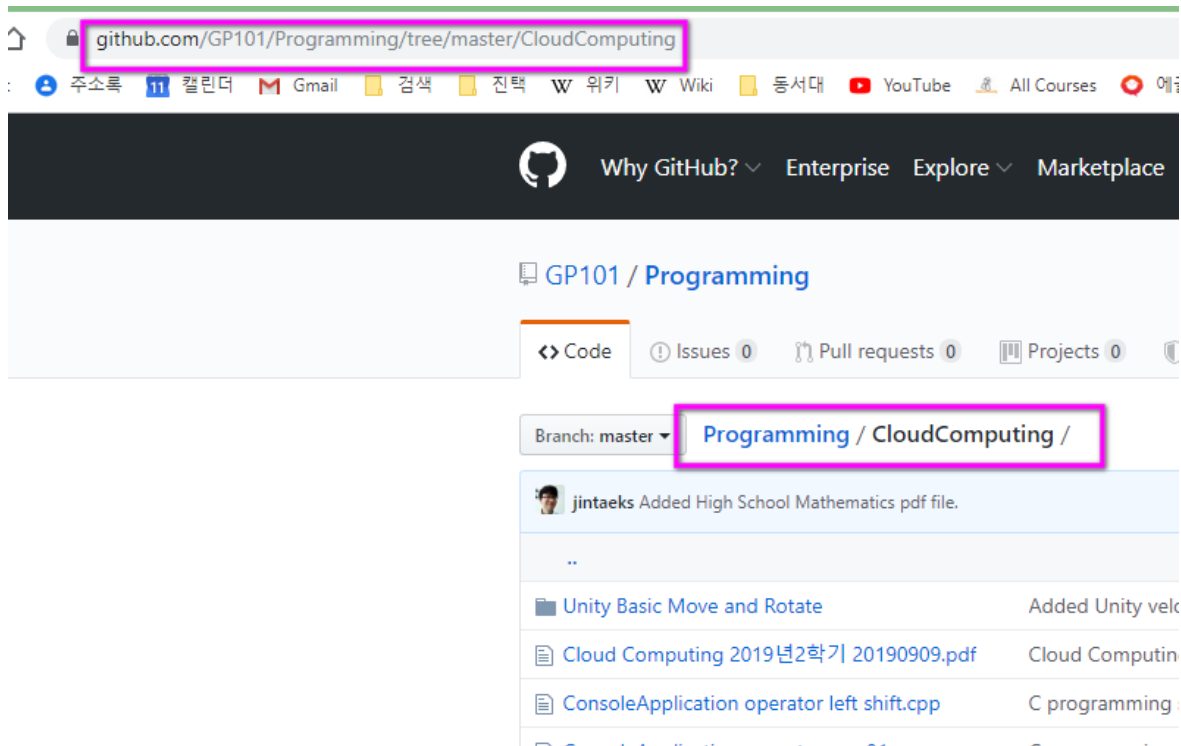
There are no restrictions on how often an access label may be used. The effect of an access label is to change the access level of the succeeding member definitions. The effect lasts until the next access label is encountered or the class definition ends.

2) Understand source files listed below:

Link: <https://github.com/GP101/Programming/tree/master/CloudComputing>

- ConsoleApplication operator overloading02.cpp
- ConsoleApplication operator01.cpp
- ConsoleApplication virtual01.cpp
- CppOcw_shared_ptr01.cpp

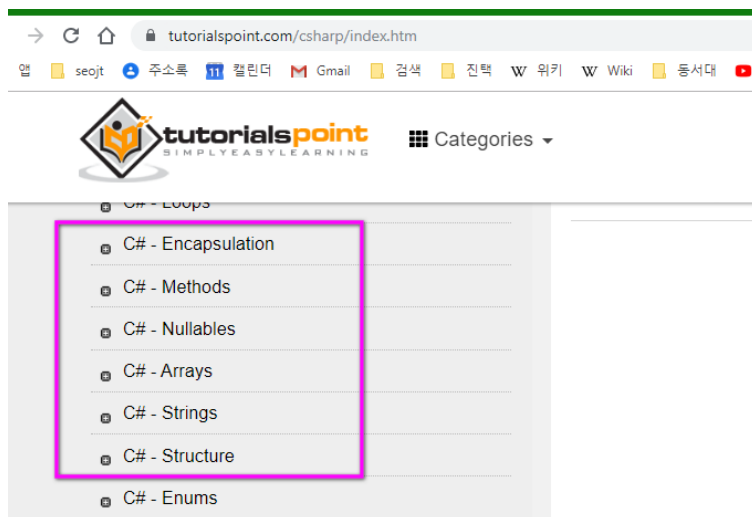
- CppOcw_shared_ptr02.cpp
- CppOcw_shared_ptr03_safe bool idiom.cpp
- CppOcw_shared_ptr04_copy and swap.cpp
- CppOcw_shared_ptr05_swap and reset.cpp
- CppOcw_shared_ptr06 safe bool and explicit.cpp
- CppOcw_shared_ptr07 weak_ptr.cpp
- CppOcw_shared_ptr07 weak_ptr2.cpp



3) Read 6 chapters of C# tutorial at tutorials point

Link: <https://www.tutorialspoint.com/csharp/index.htm>

- C# - Encapsulation
- C# - Methods
- C# - Nullables
- C# - Arrays
- C# - Strings
- C# - Structure

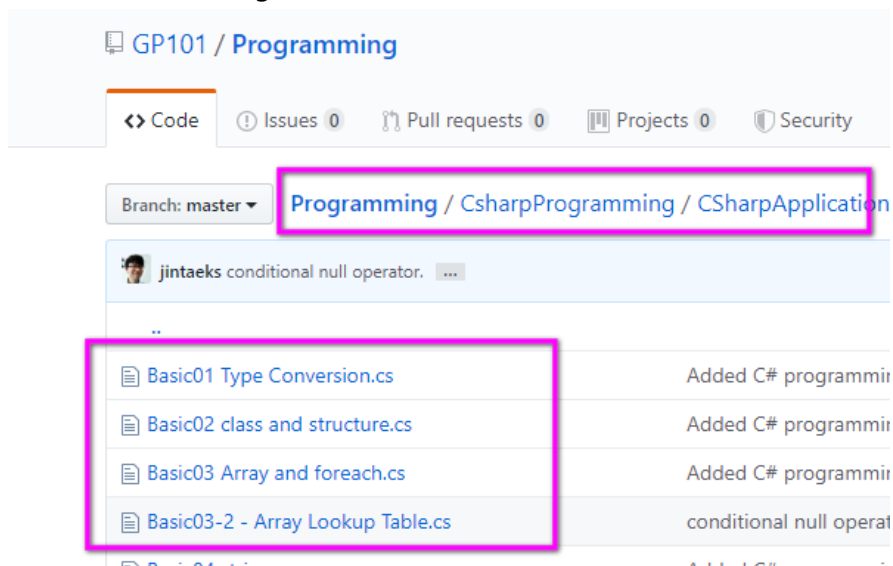


4) Understand source files listed below:

Link:

<https://github.com/GP101/Programming/tree/master/CsharpProgramming/CSharpApplication/Basic%20Reference%20Files>

- Basic01 Type Conversion.cs
- Basic02 class and structure.cs
- Basic03 Array and foreach.cs
- Basic03-2 - Array Lookup Table.cs
- Basic04 string.cs



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