Object-oriented Programming

Lecture 6

Member Initialization List

- Constant class members can only be initialized through constructor's member initialization list

Member Initialization List

```
class A
{
    const  int  x;
    const  int  y;

    public:
    A ( int val1 , int val2 ) : x ( val1 ) , y ( val2 )
    {
    }
};


int main()
{
    A  a ( 5 , 10 );
}
```

name of member variable

name of parameter

Storage-class Specifiers

1. Auto
2. Register
3. Extern
4. Static
5. Mutable

We are concerned with only static and mutable in this course

Mutable Variables

- We know that constant functions cannot modify any data member of the class

- However, *if* we want to allow modification of some variable inside a constant function then we can make that variable **mutable**

Mutable Variables

```cpp
class MyClass
{
        int a;
        mutable float b;

        public:
        void func( ) const
        {
                b = 12.5f;    // OK: This will work
                a = 99;       // This will cause error
        }
};
```