C++ Notes

List of Operators

Output	<<
Input	>>
Assignment	=
Addition	+
Subtraction	-
Multiplication	*
Division	/
Modulo	%
Greater Than	>
Less Than	<
Greater Than or Equal	>=
Less Than or Equal	<=
Equal	==
Not Equal	!=
AND	&&
OR	||
NOT	!
Increment	++
Decrement	--
Extended Assignment	+=, -=, *=, /=, %=

Even or Odd Program Code

```cpp
main.cpp
1    /*
2        This program will accept an integer as input from the user and output whether it is an even or an
3        odd number. Note that an even number is any number divisible by 2. This includes zero because 0 divided
4        by 2 is 0 with no remainder.
5    */
6
7
8    #include <iostream> // Import cin and cout functions so that we can input and output values
9    using namespace std; // Statement that allows us to use the standard library (iostream for example) easier
10
11   int main() // The main function is a user-defined function where the program starts running
12   {
13       int x; // We need to input an integer, so first we declare it
14       cin >> x; // Now we can input the integer with cin AFTER it has been declared
15
16       // Our goal now is to determine if x is odd or even by checking if it is divisible by 2 or not
17
18       if (x % 2 == 0) // The mod operator % checks for remainder of division. If remainder is 0, then x is even
19       {
20           cout << "Even";
21       }
22       else // There are only two options - even or odd, so if it's not even, it must be odd and we can use else
23       {
24           cout << "Negative";
25       }
26
27       // We output the answer in the if statement tree, so we don't need to do anything else, program is done!
28
29       /* Note that user-defined functions like main (cin/cout is NOT a userdefined function) and if statements
30          require a set of brackets in order to distinguish between code included in the function/if statement
31          and outside code */
32   }
```