VS C++

2, 3

G++

2, 2

According to the C++ standard on cplusplus.com and operator priority on Visual C++, the prefix increment operator’s priority is lower than the priority of function, so when the function F2 is executed, the parameters priority is left one higher than right one, causing the ++n statement is first executed and the function F1, so the result is 2, 3.

According to the g++ bug, the Increment/decrement operator (++/--) not working as expected - a problem with many variations. I guess the code is similar to this condition, and causing this problem.

Operator priority is the fundamental issue when learn any programming languages, and the implementation is depending on different complier. Even if the designers of compiler follows the standard of programming language, they may make some mistakes unavoidably and produce some bugs. This lab tells us that we should design the product carefully and do our best to maintain the performance of product.

Reference:

1. <http://en.cppreference.com/w/cpp/language/operator_precedence>
2. <https://msdn.microsoft.com/zh-tw/library/126fe14k.aspx>
3. <https://gcc.gnu.org/bugs/>