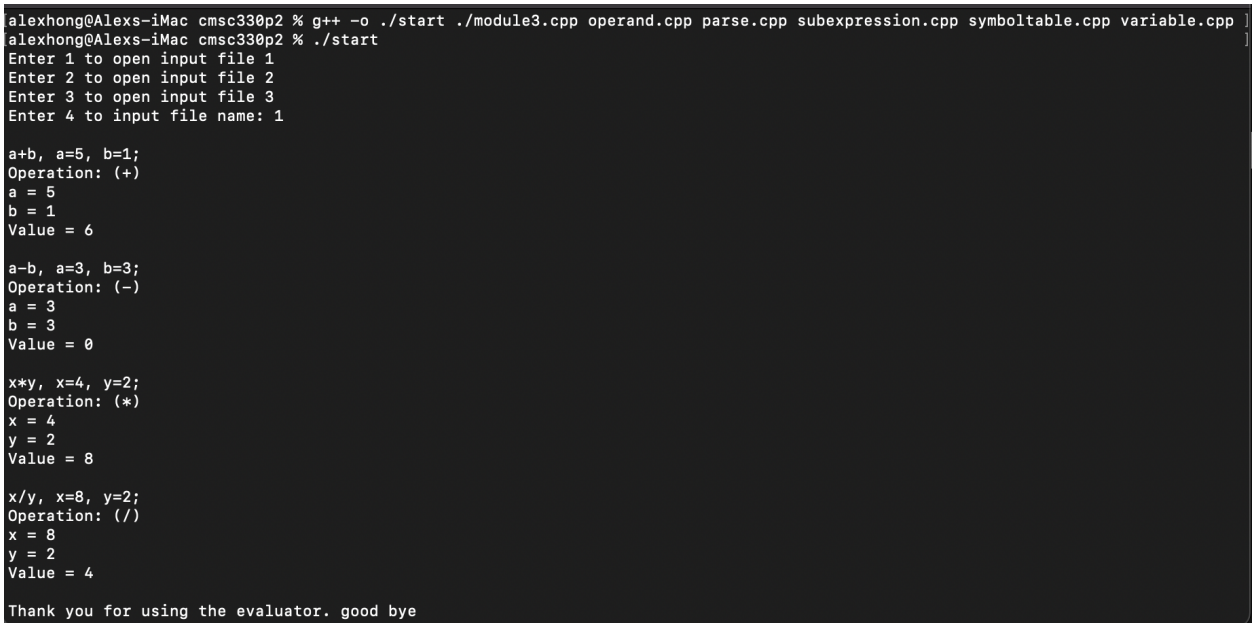
Compilation instructions:
open terminal in project folder (mac)
type: g++ -o ./start ./module3.cpp operand.cpp parse.cpp subexpression.cpp symboltable.cpp variable.cpp
type: ./start

Test case 1:

Test Case 1	Input: a+b a=5 b=1 a-b a=3 b=3 x*y x=4 y=2 x/y x=8 y=2	Expected output: 6 0 8 4	Actual output: 6 0 8 4	Pass



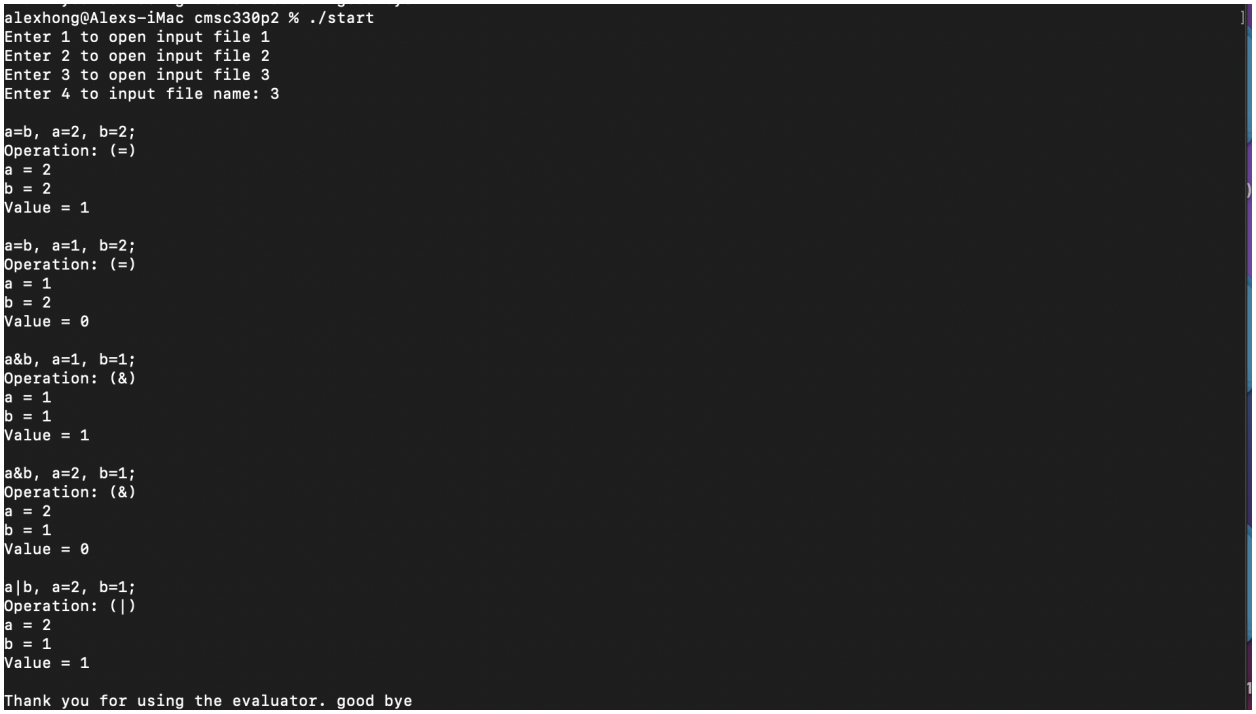
Test case 2:

Test Case 2	Input: a! a=5 a>b a=3 b=2 a<b a=2 b=3 a>b a=1 b=2 a<b a=2 b=1	Expected output: 120 1 1 0 0	Actual output: 120 1 1 0 0	Pass

```
alexhong@Alexs-iMac cmsc330p2 % ./start
Enter 1 to open input file 1
Enter 2 to open input file 2
Enter 3 to open input file 3
Enter 4 to input file name:
2

a!, a=5;
Operation: (!)
a = 5
Value = 120

a>b, a=3, b=2;
Operation: (>)
a = 3
b = 2
Value = 1

a<b, a=2, b=3;
Operation: (<)
a = 2
b = 3
Value = 1

a>b, a=1, b=2;
Operation: (>)
a = 1
b = 2
Value = 0

a<b, a=2, b=1;
Operation: (<)
a = 2
b = 1
Value = 0

Thank you for using the evaluator. good bye
```

Test case 3:

Test Case 3	Input: a=b a=2 b=2 a=1 a=1 b=2 a&b a=1 b=1 a&b a=2 b=1 a|b a=2 b=1	Expected output: 1 0 1 0 1	Actual output: 1 0 1 0 1	Pass



Lessons learned: I learned the fundamentals of c++ and modifying existing source code. I consulted several online sources in addition to the course material to learn syntax and c++ program structure. I also learned the structure and inheritance protocol for c++ firsthand. Finally, I drew parallels in how to prompt for user input in c++ as well as in Java.

Development process: I started by adding the missing operation .h files. I then focused on taking in user input and feeding to the subexpression and operand classes for parsing. I then focused on making sure that dependent classes were included in the required .cpp files.I then focused on creating a menu that loops for user input.