

Function Trace Lab Instructions

In this exercise you will learn to trace code by executing every line and function calls in order and updating the variables accordingly.

1. Start with any sheet that has the word “Main” on top.
2. Execute the statements line by line.
 - a. If one of the operations is a function call, then you will fill in the associated function call card with the appropriate argument values and continue to the named function sheet.
 - b. Perform the function trace specified in the function sheet and obtain a return value, if any.
 - c. Copy the return value into the function call card in the appropriate place
 - d. Continue execution of the next line

An example with a “Main”, two functions “A” and “B” have been provided for you with all the function call cards and variable updates filled out appropriately as it would be during a trace you would have to perform.

Once you understand what you need to do, please complete the lab on your own by tracing the statements and fill out the values in the appropriate places.

Main

In this exercise you will perform the following operations in order. If one of the operations is a function call, then you will fill in the function call card that matches the operation with the appropriate argument values and continue to the named function sheet. Then you will wait until you get a value back from the function before doing your next operation.

```
int u=20, w=3;
float result = 0;

result = A(u);
result = result + A(w)
result = result + B(w);
```

Function trace (fill in the values as you read through the code line by line. If a value changes put the new value in cell on the next row down, that is directly underneath the variable name

Line	u	w	result
1	20	3	-
2	20	3	0.0
3	20	3	101.0
4	20	3	178.0
5	20	3	184.0
6			
7			
8			
9			
10			
11			

Main function call cards

__101__ A(__20__)

__6.0__ B(__3__)

__77__ A(__3__)

_____ B(_____)

_____ A(_____)

_____ B(_____)

_____ A(_____)

_____ B(_____)

_____ A(_____)

_____ B(_____)

