Function Stack Tracing Homework
Sample Solutions

1)

Scratch | **Stack**

$foo(8) = ?$ 8

$f(3) = ?$ 11

note: print('In foo')
does NOT happen

Main1

bar
$x = 2$
$y = 3$
19

foo
$a = 2$
$b = 8$
8

foo
$a = 3$
$b = 11$
11

Printed Output

The value is 19

2)   Scratch   Stack

| main2 | / |

| f3 | / |
| n=2 | |

| f2 | / |

| f1 | / |

| f1 | / |

| f3 | / |
| n=6 | |

| f2 | / |

| f1 | / |

| f1 | / |

| f1 | / |

Mushroom
badger
mushroom
Snaaaaake
mushroom
badger
mushroom
snake
mushroom

3) Scratch | Stack

Main 3

s = ~~0~~ ~~1~~ ~~0~~ ~~0~~ ~~1~~ ~~1~~ ~~2~~ ~~4~~ ~~4~~ ~~5~~ ~~8~~ ~~7~~ 10

i = ~~0~~ ~~1~~ ~~2~~ ~~3~~ ~~4~~ 5

j = ~~0~~ ~~0~~ ~~1~~ ~~0~~ ~~1~~ ~~2~~ ~~0~~ ~~1~~ ~~2~~ ~~3~~ ~~0~~ ~~1~~ ~~2~~ ~~3~~ 4

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