

Name: _____

CS21 Lab 4 Written Part – Due: Sun, March 1, 11:59 PM.
Upload directly to Gradescope.

```
1 def mystery(x, y, number):                                DRAW STACK HERE
2     print("in mystery")                                  -----
3
4     # see Question 3
5     if (y > number):
6         number = x
7
8     # Draw stack at this point in execution
9     return number
10
11 def main():
12     print("in main")
13
14     a = 10
15     b = 5
16     val = 2
17
18     answer = mystery(a, b, val)
19
20     # see Question 2
21     print("answer: %d." % answer)
22     print("val: %d" % val)
23
24
25 main()
```

1. To the right of the program code (in the area beneath DRAW STACK HERE), draw the stack as it appears when the program reaches line 8.
2. At line 20 (marked # see Question 2), what variables are currently in scope? That is, what variables can you refer to in main on line 20 without getting a runtime error.
3. At line 4 (marked # see Question 3), what variables are currently in scope? That is, what variables can you refer to in mystery on line 4 without getting a runtime error.
4. Below, give the output that would be produced by running the whole program to completion: