Name: _____

CS21 Lab 4 Written Part – Due: Fri, Oct. 6, beginning of class

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

2. At line 9 (marked # see Question 2), what variables are currently in scope? That is, what variables can you refer to in main on line 9 without getting a runtime error.

3. At line 17 (marked # see Question 3), what variables are currently in scope? That is, what variables can you refer to in mystery on line 17 without getting a runtime error.

4. Below, give the output that would be produced by runing the whole program to completion: