

NAME: _____
CS21 Fall 2019, Written portion of Lab 5
Due at the beginning of class Friday, October 11

Consider the following program:

```
def clamp(val, lo, hi):  
    print("in function...")  
  
    #scope Q3  
  
    if val < lo:  
        val = lo  
  
    if val > hi:  
        val = hi  
  
    #stack Q1  
  
    return val  
  
def main():  
    a = 17  
    print("in main...")  
    result = clamp(a, 0, 10)  
  
    #scope Q2  
  
    print("a: %d" % (a))  
    print("Result: %d" % (result))  
  
main()
```

DRAW STACK HERE

1. Draw the stack as it appears when the program reaches the line `#stack Q1`.
2. For the line `#scope Q2`, which variables are currently in scope? That is, which variables can you refer to without getting a runtime error?
3. For the line `#scope Q3`, which variables are currently in scope?
4. What output is produced by the whole program?