

NAME: _____

CS21 Fall 2018, Written portion of Lab 5

Due in class Friday, October 12

Consider the following program:

DRAW STACK/HEAP HERE

```
def maxlen(str1, str2):
    print("in function...")
    #### scope Q3
    if len(str1) > len(str2):
        m = len(str1)
    else:
        m = len(str2)

    #### stack Q1
    return m

def main():
    a = "swarthmore"
    b = "college"
    print("in main...")
    result = maxlen(a, b)
    #### scope Q2
    print("Result: %s" % result)

main()
```

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