

Handout 6

Consider the following program:

1. Underline the function definitions
2. Circle the function calls
3. What variables are in scope when the program reaches the line `#scope Q1`.
4. What variables are in scope when the program reaches the line `#scope Q2`.
5. Draw the stack as it appears when the program reaches the line `#stack Q3`.
6. What output is produced by the whole program?

DRAW STACK HERE

```
def symbol(text):  
    ## scope Q1  
    if len(text) % 2 == 0: # length is even  
        return "*"   
    else: # length is odd  
        return "-"  
  
def fancify(text):  
    sym = symbol(text)  
    text = sym + text + sym  
    ## scope Q2  
    return text  
  
def main():  
    text = input("Enter a string: ")  
    fancy_text = fancify(text)  
    print("The fancy text is", fancy_text)  
    ## stack Q3  
  
main()
```