

7. There is nothing special about using numbers in the preceding exercise. To see this, draw a Box-and-Pointer diagram that shows what happens when *main* (below) executes. Also show the output that is printed. (This example is similar to the previous one, but with *lists* instead of numbers.)

```
def main():
    demo_attempt_to_change_an_arrow()
    demo_constructing_a_new_list()

def demo_attempt_to_change_an_arrow():
    my_list = [10, 50]
    attempt_to_change_an_arrow(my_list)
    print('B.', my_list)

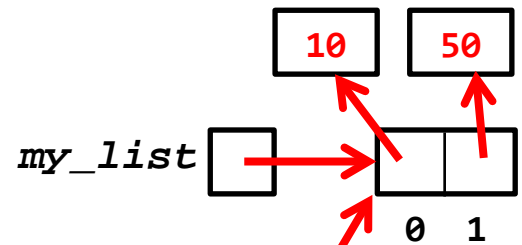
def attempt_to_change_an_arrow(my_list):
    my_list = [1, 2, 4]
    print('A.', my_list)

def demo_constructing_a_new_list():
    my_list = [10, 50]
    my_list = return_list(my_list)
    print('C.', my_list)

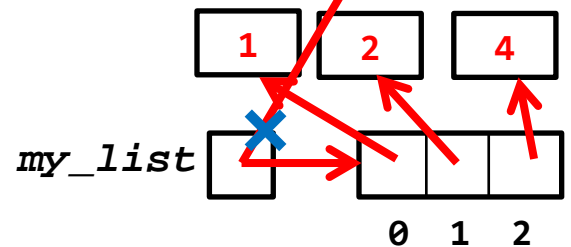
def return_list(my_list):
    return [1, 2, 4]
```

Box and Pointer diagram:

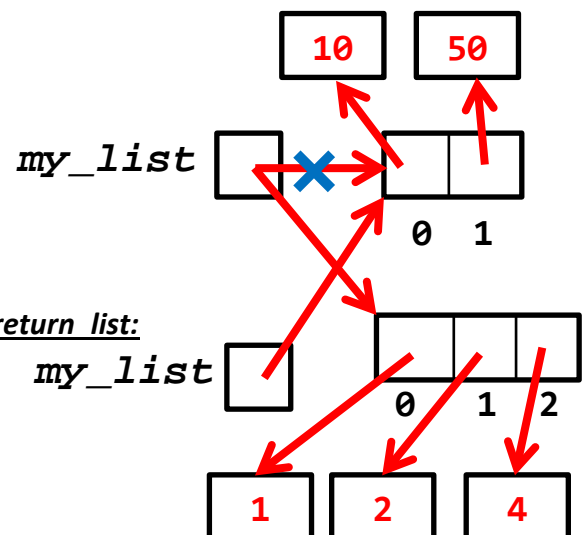
demo attempt to change an arrow:



attempt to change an arrow:



demo constructing a new list



Output:

- A. [1, 2, 4]
 B. [10, 50]
 C. [1, 2, 4]