test2-300-4

(c) **[3 marks]** Suppose we define the following function in a Python file.
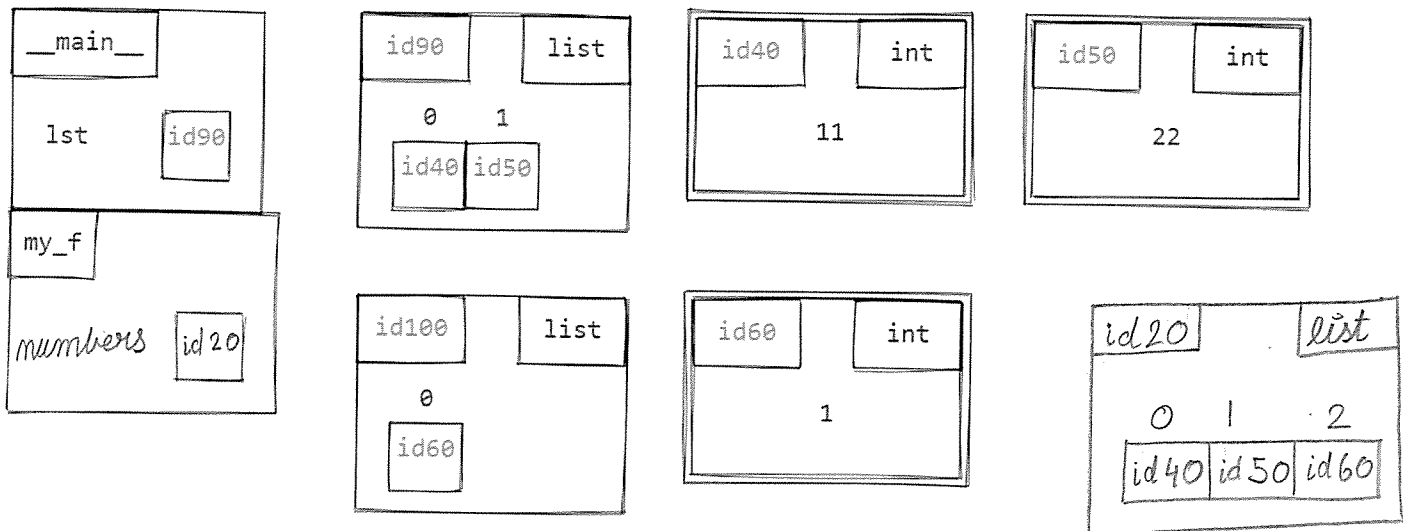
```
def my_f(numbers: list[int]) -> int:
    """..."""
    numbers = numbers + [1]

    # MARKER A
    return len(numbers)
```

Now suppose we run the file in the Python console and execute the following code:

```
>>> lst = [11, 22]
>>> my_f(lst)
```

(i) Complete the *object-based memory model diagram* below to show the state of memory when MARKER A is reached, immediately before the return statement in my_f. You may need to add additional boxes for new objects. You only need to show the final state of memory (and not any intermediate steps before MARKER A).

(ii) Complete the following Python console interactions by writing the values that would be displayed.

```
>>> lst = [11, 22]
>>> my_f(lst)
3

>>> lst
[11, 22]
```