

COMP  
110

# CL06: Memory Diagrams Practice

```
1 def speak(sound: str, repeat: int) -> None:
2   |   print(sound * repeat)
3
4   speak(sound="woof", repeat=3)
5   speak(sound="meow", repeat=2)
```

## Stack

Globals

## Heap

## Output

```
1 def speak(sound: str, repeat: int) -> None:
2     |     print(sound * repeat)
3
4     speak(sound="woof", repeat=3)
5     speak(sound="meow", repeat=2)
6
7     print(sound)
```

```
1 ∨ def jersey_num(number: int) -> int:
2   |     return number + 1
3
4 ∨ def make_jersey(name: str, number: int) -> str:
5   |     print(name + " is number " + str(jersey_num(number=number)))
6   |     return name + ":" + str(number + 1)
7
8   print(make_jersey(name="Lytle", number=7))
```

## Stack

Globals

## Heap

## Output

## What if...

```
1 def make_jersey(name: str, number: int) -> str:
2     | print(name + " is number " + str(jersey_num(number=number)))
3     | return name + ":" + str(number + 1)
4
5 def jersey_num(number: int) -> int:
6     | return number + 1
7
8 print(make_jersey(name="Lytle", number=7))
```

## What if...

```
1 def make_jersey(name: str, number: int) -> str:
2     | print(name + " is number " + str(jersey_num(number=number)))
3     | return name + ":" + str(number + 1)
4
5 def jersey_num(number: int) -> int:
6     | return number + 1
7
8 print(make_jersey(name="Lytle", number=7))
```

Confused? Try diagramming it!