Week 1 Quiz: The Python Memory Model

Consider the following code.

```python
def f(x, y):
    x = 10  # This line is odd--why?
    y.append(x)
    g(y)

def g(var):
    y = 6
    var.append(y)

if __name__ == '__main__':
    name = 'Dorian'
    my_var = [2]
    f(name, my_var)
    print(name, my_var)
```

1. Explain why the assignment statement `x = 10` inside the body of `f` is odd.

2. Draw a memory model diagram showing the state of this program when it is run, immediately before `g` returns.
   
   **Hint**: your diagram should have three frames, each containing two variables.