4. Draw a Box-and-Pointer diagram that shows what happens when ***main*** executes. Then indicate what output is printed, assuming appropriate ***print*** statements.

Output from printing in *foo*:

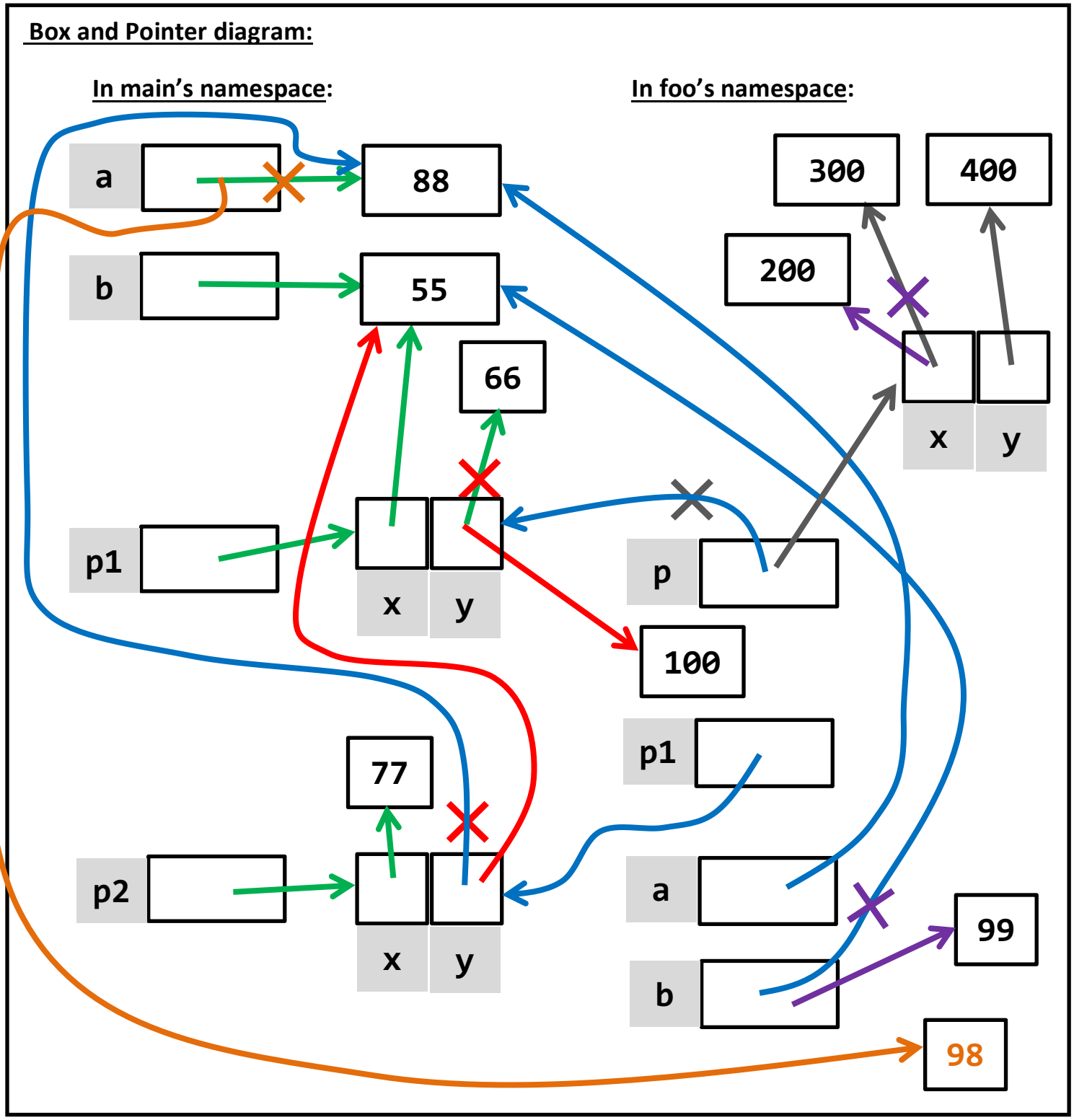
```
a:   ___ 88 __
b:   ___ 99 __
p.x:   ___ 200 __
p.y:   ___ 400 __
p1.x:   ___ 77 __
p1.y:   ___ 55 __
```

Output from printing in *main*:

```
a:   ___ 98 __
b:   ___ 55 __
p1.x:   ___ 55 __
p1.y:   ___ 100 __
p2.x:   ___ 77 __
p2.y:   ___ 55 __
```

```
def main():
    a = 88
    b = 55
    p1 = Point(b, 66)
    p2 = Point(77, a)

    a = foo(p1, p2, a, b)

    <print statements here>


def foo(p, p1, a, b):
    p.y = 100
    p1.y = b
    p = Point(300, 400)
    p.x = 200
    b = 99

    <print statements here>

    return a + 10


main()
```

Draw the entire box-and-pointer diagram on a *separate* sheet of paper, then staple that sheet to this handout.



The arrows form in the following order:

green then *blue* then *grey* then *red* then *orange*