

Quiz 2 Solutions

Brian Hou

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1. What Would Python Print?

```
wild = 2

def pig(out):
    while out < 10:
        if out % 2:
            print('oink')
        if out % 3:
            print('squeal')
        def x(x):
            return out + x
        out = out * out
    return x(out)

def hog(wild):
    while pig(wild):
        wild = wild // 3
        if wild % 3 == 0:
            return pig(wild + 3)

def swine(hog):
    return hog(wild) + wild
```

```
>>> pig(3)
oink
oink
162

>>> y = hog(7)
oink
squeal
squeal
squeal
oink
oink

>>> hog(swine(hog))
squeal
squeal
oink
oink
Error

>>> swine(pig)
squeal
squeal
34
```

2. Draw the environment diagram.

```
x = 2
def dread(pirate):
    x = 30
    def roberts(westley):
        x = 400
        return westley + pirate(x)
    return roberts(x)
dread(lambda spot: x + spot)
```

<http://goo.gl/H5R63q>