

6.00 Handout, Lecture 5
(Not intended to make sense outside of lecture)

```
D = {1: 'one', 'deux': 'two', 'pi': 3.14159}
D1 = D
print D1
D[1] = 'uno'
print D1
for k in D1.keys(): print k, '=', D1[k]

def gcd(int1, int2):
    """int1 and int2 are of type integer
       returns the greatest common divisor of int1 and int2"""
    smaller = min(int1, int2)
    i = smaller
    result = None
    while i >= 1 and result == None:
        if int1%i == 0 and int2%i == 0:
            result = i
            i = i - 1
    return result

vall = int(raw_input('Enter an integer: '))
val2 = int(raw_input('Enter an integer: '))
print 'GCD of', vall, 'and', val2, '=', gcd(vall, val2)

def f(x):
    x = x + 1
    print 'x =', x
    return x

x = 3
z = f(x)
print 'x =', x

def g(x):
    def h(x):
        y = x
        return y + 9
    x = x + 1
    ans = h(x)
    return ans

x = 0
z = g(x)
print 'x =', x
print 'z =', z
print 'y =', y
w = h(z)
```