

6.00 Handout, Lecture 7
(Not intended to make sense outside of lecture)

```
EtoF = {'one': 'un', 'two': 'deux', 'three': 'trois'}
print EtoF['two']
print EtoF
```

```
-----
Input a floating point value for base
Input a floating point value for height
Compute square root of (base*base + height*height)
    and put result in the floating point variable hyp
Print 'The hypoteneuse is: ' + str(hyp)
```

```
import math

#Get base
inputOK = False
while not inputOK:
    base = input('Enter base: ')
    if type(base) == type(1.0): inputOK = True
    else: print('Error. Base must be a floating point number.')

#Get Height
inputOK = False
while not inputOK:
    height = input('Enter height: ')
    if type(height) == type(1.0): inputOK = True
    else: print('Error. Height must be a floating point number.')

hyp = math.sqrt(base*base + height*height)

print 'Base: ' + str(base) + ', height: ' + str(height) + ', hyp: ' + str(hyp)
```

```
-----
def getFloat(requestMsg, errorMsg):
    inputOK = False
    while not inputOK:
        val = input(requestMsg)
        if type(val) == type(1.0): inputOK = True
        else: print(errorMsg)
    return val

base = getFloat('Enter base: ', 'Error: base must be a float')
height = getFloat('Enter height: ', 'Error: height must be a float')
hyp = math.sqrt(base*base + height*height)
print 'Base: ' + str(base) + ', height: ' + str(height) + ', hyp: ' + str(hyp)
```