

6.00 Handout, Lecture 5

(Not intended to make sense outside of lecture)

```
Test = (1, 2, 3, 4, 5)
print Test[0]
print Test[1]

x = 100
divisors = ()
for i in range(1,x):
    if x%i == 0:
        divisors = divisors+(i,)
print divisors

Techs = ['MIT', 'Cal Tech']
Ivys = ['Harvard', 'Yale', 'Brown']
Univs = []
Univs.append(Techs)
print 'Univs =', Univs

Univs.append(Ivys)
print 'Univs =', Univs
for e in Univs:
    print 'e =', e

flat = Techs + Ivys
print 'flat =', flat

artSchools = ['RISD', 'Harvard']
for u2 in artSchools:
    if u2 in flat:
        flat.remove(u2)

print 'flat =', flat

flat.sort()
print 'flat =', flat

flat[1] = 'UMass'
print 'flat =', flat
```

```
L1 = [2]
L2 = [L1, L1]
print 'L2 =', L2
L1[0] = 3
print 'L2 =', L2
L2[0] = 'a'
print 'L2 =', L2

L1 = [2]
L2 = L1
L2[0] = 'a'
print 'L1 =', L1
print 'L2 =', L2

L1 = [2]
L2 = L1[:]
L2[0] = 'a'
print 'L1 =', L1
```

```

EtoF = {'bread': 'du pain', 'wine': 'du vin', \
         'eats': 'mange', 'drinks': 'bois', \
         'likes': 'aime', '1': 'un', \
         '6.00':'6.00'}
print EtoF
print EtoF.keys()
print EtoF.keys
del EtoF[1]
print EtoF

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 translateWord(word, dictionary):
    if word in dictionary:
        return dictionary[word]
    else:
        return word

def translate(sentence):
    translation = ''
    word = ''
    for c in sentence:
        if c != ' ':
            word = word + c
        else:
            translation = translation + ' ' \
                          + translateWord(word, EtoF)
            word = ''
    return translation[1:] + ' ' + translateWord(word, EtoF)

print translate('John eats bread')
print translate('Steve drinks wine')
print translate('John likes 6.00')

def keySearch(L, k):
    for elem in L:
        if elem[0] == k: return elem[1]
    return None

```

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