CS 160
CS Orientation

More Lists in Python...
Odds and Ends

• Testing out of CS 161 – Get the override and sign up to challenge now! You have to have a grade before getting into CS 162.
• No lab this week!
• No demo hours this Friday, demo M-R!
• Assignment #8...
Python Strings vs. Lists/Arrays

```
def fun(X):
    X[0] = 'b'
    return X
```

```
fun(1)
```

immutable

mutable
```python
1 def fun(x):
2     x+='b'  # works on strings and lists, but only changes lists outside fun
3     x[0]='b'  # only works on lists, not strings
4     print(x[0])
5
6 def main():
7     s="hi"  # string
8     l=['h','i']  # list of characters
9     fun(s)
10    print(s)
11    fun(l)
12    print(l)
13
14    i=[1,2,3]  # make a list of integers
15    i2=i  # make i2 refer to i
16    print(i)
17    print(i2)
18
19    i=i+[6]  # this will only change i and not i2, i+=[6] will change both
20    print(i)
21    print(i2)
22
23 main()
```

2-D Array Demo...

- What is it?
- When would you use one?