ECS15

sequence
There are three kinds of sequences in Python:

**Strings** – we use these a lot.

“albatross”

**Lists** – we saw those last time, they are important.

[1,1,2,3,5,8,13]

**Tuples** – a specialized kind of list: only does some of the things a list can, but does them more efficiently. We will ignore tuples in this course.

(1,3,5,7,9)
Using sequences

- We can concatenate sequences. “drive” + “way” has value “driveway”
  \[ [1,2,3] + [3,2,1] = [1,2,3,3,2,1] \]
Looking for an item

- Boolean expressions to test for the presence of an item:

  'i' in 'team'

  7 in range(1,7)
Using sequences

- Use sequences in for loops
  
  ```python
  for count in range(1,11):
      print (count)

  for animal in ["dog", "cat", "pig", "cow"]:  
      print ("I love my",animal)
  ```
Another random function in the random module

`random.shuffle(deck)`

Takes the list `deck` and shuffles it.
Now to deal a hand…

- deck[0] is the first item in the deck
- deck[i] is the ith item in the deck
- deck[51] is the last item (there are 52 cards in a deck)
- deck[52] is an error!
- deck[i], where i is the index.
How to avoid the error?

```
len(deck) = 52

if i >= len(deck):
    print ("Not a good index.")
else:
    print ("The",str(i)+"th card is",deck[i])
```
Dealing!

- Dealer gets two cards
- Player gets two cards
- How do we decide who wins?
Need to know values

- Make lists of values paralleling list of ranks
- Look up value of rank of each card
Finally, add up score

- My hand and your hand