<table>
<thead>
<tr>
<th>4 fail</th>
<th>got</th>
<th>A</th>
<th>: A B C</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 pass</td>
<td>got</td>
<td>A</td>
<td>: A</td>
</tr>
</tbody>
</table>

Johnnys Fried Chicken on 7th Avenue is the best!
Announcements

• Read for next time
  – Chapter 4 (pages 55-61) (note: we will work with images a different way)
  – Chapter 5

• Assignment 2 out - APTs

• Reading Quiz on Blackboard
  – Due before class next time
More on Strings

• Strings are indexed starting at 0
• Example: ‘word’

```
0 1 2 3
```

• Use [num] – to refer to a particular character in word
• Use [x:y] to refer to a slice of the string starting at position x and up to but not including position y. Can leave out x or y.
Examples

phrase = "Duke Blue Devils"
print phrase[0]
print phrase[-3]
print phrase[1:3]
print phrase[5:10] + phrase[:4]
print (phrase[phrase.find('ev'):]).upper()
APTs

• An APT is one a system we have setup to let you focus on solving one method.
• Similar to javaBat
• Snarf the APT, test it until you get all green
• Run in Eclipse
• Solve some APTs now
Lists

• A list is a collection of objects

scores = [99, 78, 91, 84]
allAboutMe = [“Mo”, 25, “934-1234”]
club=[“Mo”, “Jo”, “Po”, “Flo”, “Bo”]

• Lists are mutable – use [num] to change a value

• Lists are indexed starting at 0, or -1 from the end

• Functions: max, min, len, sum

• Slice lists [:]
List Examples

scores = [10, 9, 10, 8]
print scores
scores[2] = 5
print scores
print max(scores)
print len(scores)
print sum(scores)
print scores[1:] 
print scores[1]
List before/after modification

score = [10, 8, 10, 9]

score [2] = 5
Processing List Items

- Process all the items in a list, one item at a time
- Format: \( \text{for variable in list:} \)
  - block
- Example:

  ```python
  sum = 0
  nums = [6, 7, 3, 1, 2]
  for value in nums:
    sum = sum + value
  print sum
  ```
Copying vs aliasing

```python
names = ['jo', 'mo', 'bo']
club = names
team = names[:]
names[1] = 'flo'
print names
print club
print team
```