Agenda

• Announcements
• for loop – strings & lists
• index
• BMI
• Passwords
for loop

```
for _____ in ______:
    print ______
```

School = "Duke Univ"
for letter in school:
    print letter

Pets = ["dog", "cat", "spider"]
for animal in pets:
    print animal

Both string and list are a sequence (in Python).
Two ways of doing the same

```python
school = "Duke Univ"
for letter in school:
    print letter
```

```python
school = "Duke Univ"
for index in range( len(school) ) :
    print school[index]
```

```python
print range( len(school) )
[0, 1, 2, 3, 4, 5, 6, 7, 8]
```
Niklaus Wirth (Turing Award, 1984)

- Designed and implemented several programming languages including Pascal, Modula-2, Oberon

- Wrote the paper that popularized the idea of step-wise refinement
  - Iterative enhancement
  - Grow a working program

- Cranky or tasteful?

Simple, elegant solutions are more effective, but they are harder to find than complex ones, and they require more time which we too often believe to be unaffordable
BMI

• Functions used:
  – urllib.urlopen("http://...")
  – .readlist()
  – .split()
  – .append(lst)
BMI

• Pick out code that reads and convert data:
  – Put in function `def readAndConvert()`

• Put print so you can see what the data contains