Lecture 7: October 17, 2019

Reading: §6 **Assignments:** Homework 2, due on October 24 at 11:59pm

1. Greetings and felicitations!
2. String methods: methods that change, add, or delete characters do *not* alter the string to which they are applied; they return a new string that is a copy of the old string, suitably modified
3. String methods: type of characters in string (return `True` or `False`) [*strtype.py*]
   (a) *S*`.isalpha()` — `True` if only alphabetics (letters) in *S*
   (b) *S*`.isalnum()` — `True` if only alphanumerics (letters or digits) in *S*
   (c) *S*`.isdigit()` — `True` if only digits in *S*
   (d) *S*`.isspace()` — `True` if only white space (blanks, tabs, newlines) in *S*
   (e) *S*`.isupper()` — `True` if all letters in *S* are upper case
   (f) *S*`.islower()` — `True` if all letters in *S* are lower case
4. String methods: changing case of letters in string (return result of applying method) [*strchcase.py*]
   (a) *S*`.capitalize()` — If the first character of *S* is a letter, capitalize it
   (b) *S*`.title()` — Capitalize each word in *S*
   (c) *S*`.lower()` — Change all upper case letters in *S* to lower case
   (d) *S*`.upper()` — Change all lower case letters in *S* to upper case
   (e) *S*`.swapcase()` — Change all upper case letters in *S* to lower case and *vice versa*
5. String methods: stripping blanks from strings (return result of applying method) [*strstrip.py*]
   (a) *S*`.lstrip()` — Delete all leading white spaces from *S*
   (b) *S*`.rstrip()` — Delete all trailing white spaces from *S*
   (c) *S*`.strip()` — Delete all leading and trailing white spaces from *S*
6. String methods: find characters and substrings (return position or cause exception) [*strfind.py*]
   (a) *S*`.find(`*s*`)` — Return the index of the first occurrence of *s* in *S*; -1 if *s* not in *S*
   (b) *S*`.index(`*s*`)` — Return the index of the first occurrence of *s* in *S*; `ValueError` exception if *s* not in *S*
   (c) *S*`.rfind(`*s*`)` — Return the index of the last occurrence of *s* in *S*; -1 if *s* not in *S*
   (d) *S*`.rindex(`*s*`)` — Return the index of the last occurrence of *s* in *S*; `ValueError` exception if *s* not in *S*
7. String methods: miscellaneous [*strmisc.py*]
   (a) *S*`.count(`*s*`)` — Return the number of times *s* occurs in *S*
   (b) *S*`.startswith(`*s*`)` — `True` if *S* starts with *s*
   (c) *S*`.endswith(`*s*`)` — `True` if *S* ends with *s*
   (d) *S*`.replace(`*s*`,`*t*`)` — Replace all occurrences of *s* with *t* in *S*