

Outline for November 9, 2012

Reading: §16

Assignment due: Friday, November 9, 2012 at 5:00 PM

1. String methods
 - a. Rule: 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
2. String methods: type of characters in string (return `True` or `False`) [*strtype.py*]
 - a. `S.isalpha()` — `True` if only alphabetic (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
3. 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*
4. 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`
5. 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`
6. 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`