CS 150 Fall 2022 – Quiz 3 “Cheat Sheet”

Numeric Operators
+ , - , / , *: Addition, subtraction, division, multiplication
//: Floor division: Round division result down to nearest whole number
%: Modulus: Evaluate to remainder of division

- Range
  range(stop): Equivalent to range(0, stop, 1)
  range(start, stop[, step]): Create sequence of integers from inclusive start to exclusive stop by step

- Slicing
  seq[start[:stop[:step]]]: Slice sequence seq from inclusive start to exclusive stop by step

Input/Output
- Reading input from the user
  input(message): Displays message to the user and returns what the user typed as a string

Strings
- The following functions are built-in
  len(string): Returns the number of characters in the string
  int(string), float(string): Converts numeric string to int or float
  str(object): Converts object, e.g. int or float to a string
  sorted(string): Returns the characters of the string as a list in sorted order
- String object methods
  upper(), lower(), capitalize(): Returns a new upper or lower-cased, or 1st letter upper-cased string
  find(some_string): Returns the first index that some_string occurs at in the string or -1 if not found
  find(some_string, index): Same as above, but starts searching at index
  replace(old, new): Return a copy of the string with all occurrences of old substituted with new
 startswith(prefix): Returns True if the string starts with prefix, False otherwise
  endswith(suffix): Returns True if the string ends with suffix, False otherwise
  strip(): Returns a copy of the string with only the leading and trailing whitespace removed
  split(): Return a list of the words in the string using whitespace as the delimiter
- String operators
  string1 + string2: Returns a new string that is the concatenation of string1 and string2
  string * int: Returns a new string that is string repeated int times
  substr in string: Returns True if substr is a substring of string, False otherwise

Modules
- random module
  randint(a, b): Return a random integer N such that a ≤ N ≤ b
  uniform(a, b): Return a random floating point number N such that a ≤ N ≤ b
- math module
  sqrt(num): Return the square root of num