

## CS 150 Fall 2021 – Quiz 4 “Cheat Sheet”

### 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 1<sup>st</sup> 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  $a \leq N \leq b$   
**uniform(a, b)**: Return a random floating point number  $N$  such that  $a \leq N \leq b$
- **math** module  
**sqrt(num)**: Return the square root of num