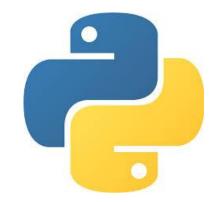


Functions and Methods

Code Girls 2021-22

Built-in Functions and Methods

- What is a function?
 - A block of reusable code to perform a single action
- What is a method?
 - A type of function that "belongs to" or is unique to an object type



Built-in functions

- int and float casting
 - int() and float()
- Regular math functions
 - Like pow() and abs()
- len()

```
Python 3.4.4 Shell Debug Options Window Help

Python 3.4.4 (v3.4.4:737efcadf5a6, Dec 20 2015, 19:28:18) [MSC v.1600 32 bit (In tel)] on win32

Type "copyright", "credits" or "license()" for more information.

>>> int(23.34)

23

>>> int(-3.1415)

-3

>>> int(5.0)

5

>>> float(7)

7.0

>>> complex(7,5)
(7+5j)

>>> complex(7)
(7+0j)

>>> l
```

String Methods

STRING METHOD	WHAT IT DOES
s.center(width)	Returns a copy of s centered within the given number of columns.
<pre>s.count(sub [, start [, end]])</pre>	Returns the number of non-overlapping occurrences of substring sub in s . Optional arguments start and end are interpreted as in slice notation.
s.endswith(sub)	Returns True if s ends with sub or False otherwise.
<pre>s.find(sub [, start [, end]])</pre>	Returns the lowest index in s where substring sub is found. Optional arguments start and end are interpreted as in slice notation.
s.isalpha()	Returns True if s contains only letters or False otherwise.
s.isdigit()	Returns True if s contains only digits or False otherwise.

String Methods

s.join(sequence)	Returns a string that is the concatenation of the strings in the sequence. The separator between elements is s .
s.lower()	Returns a copy of s converted to lowercase.
s.replace(old, new [, count])	Returns a copy of s with all occurrences of substring old replaced by new. If the optional argument count is given, only the first count occurrences are replaced.
s.split([sep])	Returns a list of the words in s, using sep as the delimiter string. If sep is not specified, any whitespace string is a separator.
s.startswith(sub)	Returns True if s starts with sub or False otherwise.
s.strip([aString])	Returns a copy of s with leading and trailing whitespace (tabs, spaces, newlines) removed. If astring is given, remove characters in astring instead.
s.upper()	Returns a copy of s converted to uppercase.

Practice - Cathy Words

- Cathy like words that start with "c" and end with "y". Write a program to see what words Cathy likes.
 - Have the user input a word
 - If the user inputs a number instead of a word, have the user re-enter a word
 - Check what the first and last letter of the word is
 - Print whether Cathy likes the word

Replit link:

https://replit.com/@CodeGirls1/21-22-Python-Lecture-4-Cathy-Words?v=1

Practice - Password Verifier

- Password Verifier
 - Have the user enter a password
 - Make sure the password is longer than 10 characters
 - Make sure the password consists of lowercase and uppercase letters, as well as numbers
 - Print whether the password is valid

Replit link:

https://replit.com/@CodeGirls1/21-22-Python-Lecture-4-Password-Verifier?v=1

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