Python Programming

Strings

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Quick Recap

- ✓ Type Inference
- ✓ Naming Case
- ✓ Type Conversion & types
- ✓ input
- ✓ print
  - ✓ Message
  - ✓ Message thro Variable
  - ✓ One to Many
  - ✓ Many to Many

Quick Recap

✓ Syntax

print('msg',sep,end,file,flush)

Example

greetingfle = open('sample.txt' , 'w')

print('Welcome' , sep = '-', end = ':' , file = greetingfle)

✓ Print with formatting operations

Combination   {+ ,}

Place holders   { }

Place holders with index   {1}

Place holders with key value { sub1}

<u>Strings</u>

✓ Standard data type

✓ Sequence of characters

✓ Enclosed within ' , " , ""'

✓ Syntax :

str = "Welcome Pythonistas "

✓ Creating String

✓ Operations on Strings

Concatenation	+
Repetition	*
Slicing | Indexing	[ ]
Range Slicing	[:]

Concatenation and Repeatition

✓Concatenation

  done on same data type only

  common to list and tuple

  I AIML from K.S.R CT

✓Repetition

  Python is very very very easy

<u>Indexing (Slicing) and Range Slicing</u>

✓ Syntax (Slicing)

variable_name [index]

✓ Indexing (Positive | Negative)

0	1	2	3	4
S	L	I	C	E
-5	-4	-3	-2	-1

✓ Syntax (Range Slicing)

variable_name [start : end : step]

✓ extracts part of the string

✓ Examples

course = "Technology"

Reverse String : step -1

Reassigning and Deleting Strings

- ✓ immutable
- ✓ Reassign : Index , Delete : del
- ✓ doesn't support item assignment instead
   replace new string

More operations on Strings

- ✓ membership operator
   in   not in
- ✓ raw string (note: escape sequence - \n, \\,\', \t, \v,\b)
   r/R
- ✓ string formatting (note: %c, %s, %d)
   %

String Functions

Fucntions	Returns
len()	No.of characters (Number)
capitalize() | title()	Capitalize first character
casefold() | lower()	Converts to lower case letter
upper()	Converts to upper case letter
center(width , fillchar) ljust | rjust	Centers the string with left and right spaces
count(string [, start [,end]])	Count no. of occurrences (Number)
find(sub[, start[, end]])	Index of occurrence (Index | -1)
replace(old, new[, count])	Replaces the string
join(iterable) Syn: string.join(iterable)	concatenates the string in iterable
strip([chars]) | rstrip | lstrip	
Case Study :	
partition() rfind() index() rindex() split() rsplit() splitlines() swapcase() startswith() endswith()	
isalnum() isalpha() isdecimal() isdigit() islower() isnumeric() isupper() isspace() istitle()	