String Creation

1. How to create a string

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# all of the following are equivalent

my\_string = 'Hello'

print(my\_string)

my\_string = "Hello"

print(my\_string)

my\_string = '''Hello'''

print(my\_string)

# triple quotes string can extend multiple lines

my\_string = """Hello, welcome to

the world of Python"""

print(my\_string)

2. How to access characters in the string

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str = 'programming'

print('str = ', str)

#first character

print('str[0] = ', str[0])

#last character

print('str[-1] = ', str[-1])

#slicing 2nd to 5th character

print('str[1:5] = ', str[1:5])

#slicing 6th to 2nd last character

print('str[5:-2] = ', str[5:-2])

3. Index out of range error

# index must be in range

>>> my\_string[15]

...

IndexError: string index out of range

# index must be an integer

>>> my\_string[1.5]

...

TypeError: string indices must be integers

4. How to change or delete a string

>>> my\_string = 'programiz'

>>> my\_string[5] = 'a'

...

TypeError: 'str' object does not support item assignment

>>> my\_string = 'Python'

>>> my\_string

'Python'

5 . >>> del my\_string[1]

...

TypeError: 'str' object doesn't support item deletion

>>> del my\_string

>>> my\_string

...

NameError: name 'my\_string' is not defined

6 . Concatenation of two strings

str1 = 'Hello'

str2 ='World!'

# using +

print('str1 + str2 = ', str1 + str2)

# using \*

print('str1 \* 3 =', str1 \* 3)

>>> # two string literals together

>>> 'Hello ''World!'

'Hello World!'

>>> # using parentheses

>>> s = ('Hello '

... 'World')

>>> s

'Hello World'

7 . Iterate through String

count = 0

for letter in 'Hello World':

if(letter == 'l'):

count += 1

print(count,'letters found')

8. String Membership Test

>>> 'a' in 'program'

True

>>> 'at' not in 'battle'

False

9. Built in functions to work with Python

str = 'cold'

# enumerate()

list\_enumerate = list(enumerate(str))

print('list(enumerate(str) = ', list\_enumerate)

#character count

print('len(str) = ', len(str))

10.str = 'cold'

# enumerate()

list\_enumerate = list(enumerate(str))

print('list(enumerate(str) = ', list\_enumerate)

#character count

print('len(str) = ', len(str))

11.

# using triple quotes

print('''He said, "What's there?"''')

# escaping single quotes

print('He said, "What\'s there?"')

# escaping double quotes

print ("He said, \"What's there?\"")

12.

# using triple quotes

print('''He said, "What's there?"''')

# escaping single quotes

print('He said, "What\'s there?"')

# escaping double quotes

print("He said, \"What's there?\"")