STRING

Escape character

```
In [10]: print("Hello there!\nHow are you?\nI\'m doing fine.")
```

```
Hello there!
How are you?
I'm doing fine.
```

row string

```
In [16]: print(r"Hello there!\nHow are you?\nI\'m doing fine.")
```

```
Hello there!\nHow are you?\nI\'m doing fine.
```

multiline string

```
In [25]: print(
             """ Dear Alice,
              Eve's cat has been arrested for catnapping,
               cat burglary,and extortion.

               scicerely,
                Bob"""
         )
```

```
 Dear Alice,
    Eve's cat has been arrested for catnapping,
     cat burglary,and extortion.

     scicerely,
      Bob
```

Indexiing & slicing

```
In [29]: spam='Hello world!'
```

```
In [31]: spam
```

```
Out[31]: 'Hello world!'
```

```
In [33]: spam[0]
```

```
Out[33]: 'H'
```

```
In [35]: spam[4]
```

```
Out[35]:  'o'

In [37]:  spam[-1]

Out[37]:  '!'
```

Slicing

```
In [40]:  spam[0:5]

Out[40]:  'Hello'

In [42]:  spam[:5]

Out[42]:  'Hello'

In [44]:  spam[6:-1]

Out[44]:  'world'

In [47]:  spam[::-1]

Out[47]:  '!dlrow olleH'

In [49]:  spam[:-1]

Out[49]:  'Hello world'
```

the in & not operator

```
In [56]:  'hello' in 'hello world'

Out[56]:  True

In [58]:  'HELLO' in 'hello world'

Out[58]:  False

In [60]:  'cat' not in 'cat and dog'

Out[60]:  False
```

upper(),lower() & title()

```
In [63]:  spam

Out[63]:  'Hello world!'

In [65]:  spam.upper()
```

```
Out[65]:  'HELLO WORLD!'

In [67]:  spam.lower()

Out[67]:  'hello world!'

In [69]:  spam.title()

Out[69]:  'Hello World!'
```

is upper() & is lower() methods

```
In [88]:  spam='Hello World'
          spam

Out[88]:  'Hello World'

In [90]:  spam.isupper()

Out[90]:  False

In [92]:  spam.islower()

Out[92]:  False

In [94]:  spam.istitle()

Out[94]:  True

In [97]:  'HELLO' .isupper()

Out[97]:  True

In [99]:  'hello'.islower()

Out[99]:  True
```

startswith & endswith

```
In [4]:   'hello world!'.startswith('hello')

Out[4]:   True

In [12]:  'hello world!'.endswith('world!')

Out[12]:  True

In [14]:  'abc123'.startswith('abcde')

Out[14]:  False
```

join() & split()

```
In [17]: ''.join(['my','name','is','gudu'])

Out[17]: 'mynameisgudu'

In [21]: ' '.join(['my','name','is','gudu'])

Out[21]: 'my name is gudu'

In [23]: ' abc '.join(['my','name','is','gudu'])

Out[23]: 'my abc name abc is abc gudu'

In [25]: 'my name is gudu.'.split()

Out[25]: ['my', 'name', 'is', 'gudu.']

In [27]: 'my abc name abc is abc gudu'.split('abc')

Out[27]: ['my ', ' name ', ' is ', ' gudu']

In [29]: 'my name is gudu'.split('m')

Out[29]: ['', 'y na', 'e is gudu']
```

rjust(),ljust(),center()

```
In [32]: 'hello'.rjust(10)

Out[32]: '     hello'

In [34]: 'hello'.ljust(10)

Out[34]: 'hello     '

In [36]: 'hello'.center(10)

Out[36]: '  hello   '

In [40]: 'hello'.center(20,'*')

Out[40]: '*******hello********'
```

removing white space

strip(),rstrip()&lstrip()

```
In [51]:  spam='     hello world!     '
          spam
```

Out[51]: '   hello world!   '

```
In [53]:  spam.strip()
```

Out[53]: 'hello world!'

```
In [55]:  spam.lstrip()
```

Out[55]: 'hello world!   '

```
In [57]:  spam.rstrip()
```

Out[57]: '   hello world!'

count method

```
In [60]:  sen='one sheep two sheep three sheep four'
          sen
```

Out[60]: 'one sheep two sheep three sheep four'

```
In [62]:  sen.count('e')
```

Out[62]: 9

```
In [64]:  sen.count('sheep')
```

Out[64]: 3

```
In [66]:  sen.count('e',6)
```

Out[66]: 8

replace method

```
In [87]:  text="Hello World1"
          text
```

Out[87]: 'Hello World1'

```
In [89]:  text.replace("World1","planet")
```

Out[89]: 'Hello planet'

```
In [92]:  fruits='apple,banana,cherry,apple'
          fruits
```

Out[92]: 'apple,banana,cherry,apple'

```python
fruits.replace('apple','orange',1)
```

```
'orange,banana,cherry,apple'
```

```python
sentence = "I like apples, Apples are my favorite fruit"
sentence.replace("apples", "oranges")
```

```
'I like oranges, Apples are my favorite fruit'
```

```python
```

string assignment completed.