

S = 'hello'

1] This is an assignment statement.

2] Process RHS first.

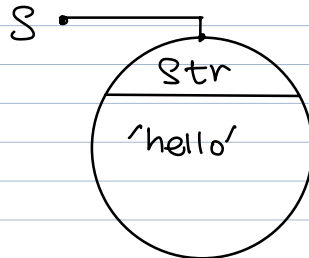
hello

3] From single quotes syntax, Python infers the type of data value to be string.

4] In order to store the value, Python allocates a new object of class 'str' in the program memory.

5] Python goes to LHS of the assignment statement and finds the variable name to be S. Therefore, it names the newly allocated object as S.

S = 'hello'



[You want to apply various functions on the above object]

>>> dir(str)

-- --

>>> dir(list)

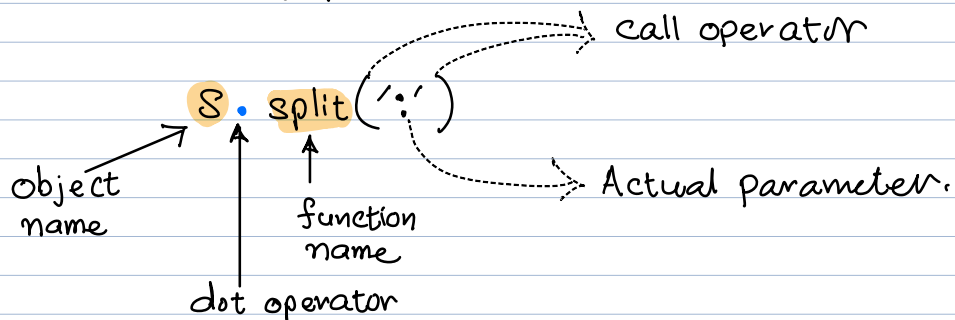
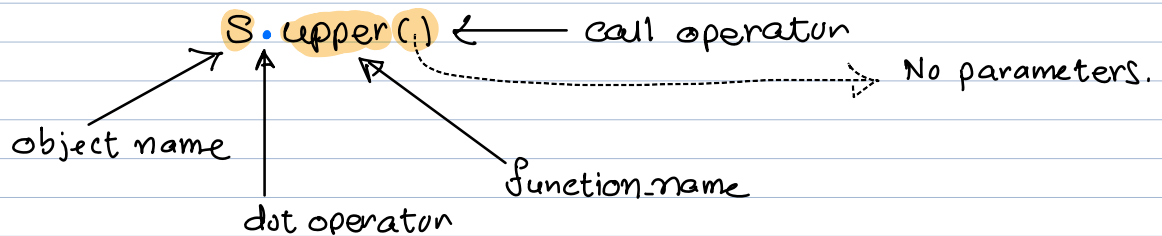
>>> S = 'hello'

>>> S.append(500)

General Syntax: How to apply function on object?

Assumption: Function that is being applied on the object
is present in the class of that object.

Syntax: object_name.function_name(parameters if any)



`S.upper()` | Function named 'upper' implemented in class str, is applied on object of class str, whose name is 'S'

internally

`str.upper(S)`

`S.split(':')`

internally

`str.split(S, ':')`