Methods

17th March, 2023.

Class methods @ class methods

They are methods used in classes, where they represent the class as a whole and not just an instance. They have their first argument as "cls" and the Syntax is @classmethods. One does not need to define any instance, unlike the others which have their first argument as "self"

Static methods
· Utility fxn. They have no "cls" or "self" as arguments. Defined like **normal fxn-**

→ name

→ Class method: defined before method definition

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```python
3   class Calculator:
4       @classmethod
5       def add(cls, a, b):
6           return a + b
7
8       @classmethod
9       def subtract(cls, a, b):
10          return a - b
11
12      @classmethod
13      def multiply(cls,a, b):
14          return a * b
15
16      @staticmethod
17      def divide(a,b) :
18          return a/b
19
20  # Create an instance of the Calculator class with initial values
21  calc = Calculator()
22
23  # Use the class methods and static method to perform calculations
24  result1 = calc.add(5, 10)
25  result2 = calc.subtract(20, 5)
26  result3 = Calculator.multiply(3, 7)
27  result4 = Calculator.divide(2,4)
28
29
30  # Print the results
31  print("Result 1:", result1)
32  print("Result 2:", result2)
33  print("Result 3:", result3)
34  print ("Result 4 :", result4)
✓ 0.0s
```

fxn → method1

Method2

Method3

→ input parameter

→ static method

→ method 3

class name

methods