# METHODS IN PYTHON

## Methods

### Instance Method

- Bound to the Object of a Class
- It can modify a Object state
- Can Access and modify both class and instance variables

### Class Method

- 1. Bound to the Class
- It can modify a class state
- Can Access only Class Variable
- Used to create factory methods

#### Static Method

- 1. Bound to the Class
- It can't modify a class or object state
- Can't Access or modify the Class and Instance Variables

# **#CLASS METHOD**

```
class Addition:
  a = 10
  b = 30
  @classmethod
  def change_number(obj,A,B):
    obj.a=A
    obj.b=B
addition=Addition()
print("Before function execution of class addition ",Addition.a+Addition.b)
addition.change_number(45,6)
print(" After function execution of Class addition", Addition.a+Addition.b)
o/p
Before function execution of class addition 40
After function execution of Class addition 51
```

#### **#INSTANCE METHOD**

```
class Addition:
  def __init__(self,a,b) -> None:
     self.a=a
     self.b=b
  def add(self):
     print(self.a+self.b)
Def sub(self):
     print(self.a-self.b)
addition=Addition(34,44)
 (addition=object/Instance class = Addition function call
 objectname.functionname)
addition.add()
```

```
#STATIC METHOD
class Addition:
   @staticmethod
  def add():
     a=45
     b=6
     print(a+b)
def sub():
     print(a-b)
addition=Addition()
#(addition=object/Instance class =Addition function call
=objectname.functionname)
addition.add()
```