

```
# oops
```

```
class Car:  
    pass
```

What is a Method?

Method is a set of code and can be invoked at any time.

```
class Car:  
    def start(self):  
        print("Car started")  
    def stop(self):  
        print("car stopped")  
    def engine_type(self, engine):  
        print(f"This car run on {engine} engine")
```

```
mercedes=Car() # created a object mercedes  
audi=Car()     #audi is an object of class car
```

```
mercedes.start()
```

Car started

```
mercedes.stop()
```

car stopped

```
mercedes.engine_type('petrol')
```

This car run on petrol engine

```
# Task 1
```

```
class Calculator:  
    def add(self,num1,num2):  
        print(f"addition of num1 and num2 = {num1+num2}")  
  
    def subtract(self,num1,num2):  
        print(f"subtraction of num1 and num2 = {num1-num2}")  
  
    def multiply(self,num1,num2):  
        print(f"multiplication of num1 and num2 = {num1*num2}")  
  
    def divide(self,num1,num2):  
        print(f"division of num1 and num2 = {num1/num2}")
```

```
calculator=Calculator() #here i am creating object of class #object in  
lower case and class name in upper class
```

```
calculator.add(2,4)
```

addition of num1 and num2 = 6

```
calculator.subtract(8,2)
subtraction of num1 and num2 = 6
calculator.multiply(2,4)
multiplication of num1 and num2 = 8
calculator.divide(2,4)
division of num1 and num2 = 0.5
```

*# constructor*

```
class Car:
```

*# constructor is a special type of method because it always has the following syntax*

*def \_\_init\_\_(self, color,engine): # properties i want to attach with car*

```
    self.color_of_car=color
    self.engine_type=engine
```

```
    def print_car_info(self):
        print(f"color of car={self.color_of_car}")
        print(f"type of engine={self.engine_type}")
```

```
mercedes=Car('silver','petrol')
```

```
audi=Car('black','diesel')
```

```
audi.print_car_info()
```

```
color of car=black
```

```
type of engine=diesel
```

*# Task 2*

```
class pizza_makers: # class is pizza_makers
```

*def \_\_init\_\_(self,size,crust): #created a constructor that takes two parameters*

```
    self.size_of_pizza=size
    self.crust=crust
```

*def pizza\_info(self): # created a method in a class, which print details of pizza*

```
    print(f"pizza is {self.size_of_pizza} inches in size with {self.crust} crust")
```

```
small_pizza=pizza_makers(8,"thin") # object created small_pizza and large_pizza
```

```
large_pizza=pizza_makers(14,"regular crust")
```

```
small_pizza.pizza_info()
```

```
large_pizza.pizza_info()
```

pizza is 8 inches in size with thin crust  
pizza is 14 inches in size with regular crust crust

```
# static keyword (number_of_steering_wheels)

# constructor
class Car:
    # constructor is a special type of method because it always has
    the following syntax
    def __init__(self, color,engine): # properties i want to attach
    with car
        self.color_of_car=color
        self.engine_type=engine

    def print_car_info(self):
        print(f"color of car={self.color_of_car}")
        print(f"type of engine={self.engine_type}")

    #@static method
    def number_of_steering_wheels(self):
        print("The car has 1 steering wheel")
```

```
mercedes=Car('silver','petrol')
mercedes.print_car_info()
mercedes.number_of_steering_wheels()
```

```
audi=Car('black','diesel')
audi.print_car_info()
audi.number_of_steering_wheels() # this is static common to both
object
```

```
color of car=silver
type of engine=petrol
The car has 1 steering wheel
color of car=black
type of engine=diesel
The car has 1 steering wheel
```

```
# calculator.py [file name]
# Task 1
```

```
class Calculator:
    def add(self,num1,num2):
        print(f"addition of num1 and num2 = {num1+num2}")

    def subtract(self,num1,num2):
        print(f"subtraction of num1 and num2 = {num1-num2}")

    def multiply(self,num1,num2):
        print(f"multiplication of num1 and num2 = {num1*num2}")
```

```
def divide(self,num1,num2):
    print(f"division of num1 and num2 = {num1/num2}")
```

```
from calculator import Calculator # from module importing a class
(imp)
```

```
class Test:
    obj=Calculator()
    obj.add(25,30)
```

addition of num1 and num2 = 55

*# Task*

*# Question :- create a package demo 1 and inside this package create a class -weather\_info.*

*# in this class ,create a method-current weather which gives output-it is very hot outside.*

*# create another package demo 2 and inside this package ,create a class - weather\_report.*

*# call the current\_weather() method in this class and print the output.*

*# demo1.py*

```
class weather_info:
    def current_weather(self,temp):
        print(f"it is very hot outside tempreature is {temp}")
```

*# demo2.py*

```
class weather_report:
    obj=weather_info()
    obj.current_weather(24)
```

it is very hot outside tempreature is 24

*# when demo1.py is different python file*

```
from demo1 import weather_info
```

```
class weather_report:
    obj=weather_info()
    obj.current_weather(24)
```

*# static method*

```
class Math:
    @staticmethod
    def Multiply(one, two):
        return one * two
```

```
math = Math()
```

```
if(12*72 == math.Multiply(12, 72)):
    print("Equal")
```

```
else:  
    print("Not Equal")  
Equal
```