In [36]:
```python
#Q1, Create a vehicle class with an init method having instance variables as name_o
#and average_of_vehicle.

class vehicle :
    def __init__ (self ,name_of_vehicle, max_speed,average_of_vehicle):

        self.name_of_vehicle = name_of_vehicle
        self.max_speed  = max_speed
        self.average_of_vehicle  = average_of_vehicle
```

In [32]:
```python
d=vehicle('honda',120,65)
```

In [33]:
```python
d.average_of_vehicle
```

Out[33]: 65

In [34]:
```python
d.name_of_vehicle
```

Out[34]: 'honda'

In [35]:
```python
d.max_speed
```

Out[35]: 120

Q3. What is multiple inheritance? Write a python code to demonstrate multiple inheritance.

If a child class inherits from more than one class, i.e. this child class is derived from multiple classes, we call it multiple inheritance in Python.03-Jul-2022

In [12]:
```python
class class1:

    def test_class1(self):
        return 'this is a class1'
```

In [11]:
```python
class class2:

    def test_class2(self):
        return 'this is class 2'
```

In [15]:
```python
class class3 (class1 ,class2 ):
    pass
```

In [16]:
```python
obj_manhali=class3()
```

In [17]:
```python
obj_manhali.test_class1()
```

Out[17]: 'this is a class1'

In [18]:
```python
obj_manhali.test_class2()
```

Out[18]: 'this is class 2'

Q4. What are getter and setter in python? Create a class and create a getter and a setter method in this class.

a getter method returns its value while a setter method sets or updates its value.

```python
In [20]: class bank_account :
             def __init__(self , balance) :
                 self.__balanace = balance

             def deposit(self , amount) :
                 self.__balanace = self.__balanace + amount

             def withdaw(self ,amount) :
                 if self.__balanace >= amount :
                     self.__balanace = self.__balanace - amount
                     return True
                 else :
                     return False

             def get_banalnce(self):
                 return self.__balanace
```

```python
In [23]: vishal=bank_account(5000)
```

```python
In [24]: vishal.get_banalnce()
```
```
Out[24]: 5000
```

```python
In [25]: vishal.withdaw(2000)
```
```
Out[25]: True
```

```python
In [26]: vishal.deposit(8000)
```

```python
In [27]: vishal.get_banalnce()
```
```
Out[27]: 11000
```

Q5.What is method overriding in python? Write a python code to demonstrate method overriding.

when you have two methods with the same name that each perform different tasks.

```python
In [30]: class x:
             def showdata(self):
                 print('hi vishal koni')


         class y(x):
             def showdata(self):
                 print('well come to manhalli vishal koni ')


         obj=y()
         obj.showdata()
```
```
well come to manhalli vishal koni
```

```python
In [37]: qustion no 2 missing
```

```
  File "C:\Users\visha\AppData\Local\Temp\ipykernel_13992\1487300754.py", line 1
    qustion no 2 missing
                ^
SyntaxError: invalid syntax
```

In [ ]:

  File "C:\Users\visha\AppData\Local\Temp\ipykernel_13992\1487300754.py", line 1
    qustion no 2 missing
                ^
SyntaxError: invalid syntax

In [ ]: