

Untitled4

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Q1, Create a vehicle class with an init method having instance variables as name_of_vehicle, max_speed and average_of_vehicle.

```
[13]: class vehicle:

    def __init__(self,name_of_vehcile,max_speed,average_of_vechicle):
        self.name_of_vehcile = name_of_vehcile
        self.max_speed = max_speed
        self.average_of_speed = average_of_vechicle

    def vechicle_details(self):
        return self.name_of_vehcile,self.max_speed,self.average_of_vechicle
```

```
[14]: car = vehicle("TATA",250,150)
```

```
[18]: car.average_of_speed
```

```
[18]: 150
```

```
[19]: car.name_of_vehcile
```

```
[19]: 'TATA'
```

```
[ ]:
```

0.0.1 Q2. Create a child class car from the vehicle class created in Que 1, which will inherit the vehicle class.

0.0.2 Create a method named seating_capacity which takes capacity as an argument and returns the name of

0.0.3 the vehicle and its seating capacity.

```
[ ]:
```

```
[20]: class car(vehicle):
        pass
```

```
[22]: obj_vechicle = car("TATA",105,250)
```

```
[25]: obj_vechicle.average_of_speed
```

```
[25]: 250
```

```
[26]: obj_vechicle.max_speed
```

```
[26]: 105
```

```
[42]: class class1:

    def __init__(self,capacity,name):
        self.capacity = capacity
        self.name = name

    def car_capacity(self):
        return self.capacity,self.name
```

```
[43]: t = class1(4,"TATA")
```

```
[44]: t.capacity
```

```
[44]: 4
```

```
[45]: t.name
```

```
[45]: 'TATA'
```

```
[ ]:
```

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

```
[47]: ## A process where the child class or object inherits the methods and  
↳ attributes from one or more parent classes.
```

```
[48]: class test1:

    def test1(self):
        print("INDIA is a DEMOCRATIC country")
```

```
[49]: class test2:

    def test2(self):
        print("SENSEX TO HIT 1 LAKH BY 2025")
```

```
[50]: class test3(test1,test2):  
      pass
```

```
[54]: obj_2 = test3()
```

```
[55]: obj_2.test1()
```

INDIA is a DEMOCRATIC country

```
[56]: obj_2.test2()
```

SENSEX TO HIT 1 LAKH BY 2025

```
[ ]:
```

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

0.0.6 class.

Getter: A method that allows you to access an attribute in a given class. Setter: A method that allows you to set or mutate the value of an attribute in a class.

```
[ ]:
```