



VIT[®]

Vellore Institute of Technology

(Deemed to be University under section 3 of UGC Act, 1956)
CHENNAI

Register Number : 23MCA1030

Name : Vinayak Kumar Singh

Subject : Python Lab

Practice Exercise for Classes, objects Constructors and Destructors

Code:

```
print("Reg No: 23MCA1030")
```

```
print("Name: Vinayak Kumar Singh")
```

```
class Vehicle:
```

```
    def __init__(self, color, topspeed, mileage, vehicle_type):
```

```
        self.color = color
```

```
        self.topspeed = topspeed
```

```
        self.mileage = mileage
```

```
        self.vehicle_type = vehicle_type
```

```
    def brake(self):
```

```
        """
```

```
        Stop the vehicle
```

```
        """
```

```
        return f"{self.vehicle_type} braking"
```

```
    def drive(self):
```

```
        """
```

```
        Drive the vehicle
```

```
        """
```

```
        return f"I'm driving a {self.color} {self.vehicle_type} which has a top speed of {self.topspeed}  
KM/hr and a mileage of {self.mileage} KMPL"
```

```
def __del__(self):  
    print(f"The destructor is called for {self.vehicle_type}")
```

```
car = Vehicle("blue", 350, 5, "car")  
print(car.drive())  
print(car.brake())  
del car
```

```
truck = Vehicle("red", 120, 8, "truck")  
print(truck.drive())  
print(truck.brake())  
del truck
```

```
bike = Vehicle("Black", 150, 45, "bike")  
print(bike.drive())  
print(bike.brake())  
del bike
```

output:

IDLE Shell 3.8.10

File Edit Shell Debug Options Window Help

Python 3.8.10 (default, Mar 15 2022, 12:22:08)

[GCC 9.4.0] on linux

Type "help", "copyright", "credits" or "license()" for more information.

>>>

===== RESTART: /home/student/classpy.py =====

Reg No: 23MCA1030

Name: Vinayak Kumar Singh

I'm driving a blue car which has a top speed of 350 KM/hr and a mileage of 5 KMPL
car braking

The destructor is called for car

I'm driving a red truck which has a top speed of 120 KM/hr and a mileage of 8 KMPL
truck braking

The destructor is called for truck

I'm driving a Black bike which has a top speed of 150 KM/hr and a mileage of 45 KMPL
bike braking

The destructor is called for bike

>>> |