Derived Classes - Default Values.

```
class Transportation:
    def __init__(self, name, speed = 75)
        self.name = name
        self.speed = speed

    def info(self):
        print(f'{self.name} can go
                {self.speed} mph')
```

→ There are many modes of transportation → motorized vehicles, self-powered vehicles, flight vehicles, water vehicles, etc.

```
class MotorizedVehicle(TransportMode):
    def __init__(self, name, speed = 80,
                 mpg = 40)
        TransportMode.__init__(self,
                               name, speed)

        self.mpg = mpg
        self.fuel_gal = 0

    def add_fuel(self, amount):
```

```
        self.fuel_gal += amount

def drive(self, distance):
    required_fuel = distance / self.mpg
    if self.fuel_gal < required_fuel:
        print('Not enough fuel')
    else:
        self.fuel_gal -= required_fuel
        print(f'{self.fuel_gal}
              gallons remaining.')
```

→ Of course, there are many kinds of motor vehicles. Let's choose one.

```
class MotorCycle(MotorizedVehicle):
    def __init__(self, name, speed=55,
                 mpg=25):
        MotorizedVehicle.__init__(self,
                                  name, speed, mpg)

    def wheelie(self):
        print("That's dangerous!")
```

⇨ we can now write a main program around this.

```
scooter = MotorCycle('Vespa', 55, 40)
dirtbike = MotorCycle('KX450F', 80, 25)

scooter.info()
dirtbike.info()

}
etc.
=

harley = MotorCycle('Harley Davidson')

harley.info()
print(harley.mpg)
print(harley.fuel_gal)
```

⇨ Note: harley will get instantiated with the default values of the MotorCycle Class!!

```
generic = MotorizedVehicle('People Carrier')
generic.info()
print(generic.mpg)
print(generic.fuel_gal)
```