**Lab\_07:**

class Vehicle:

def \_\_init\_\_(self, make, model):

self.make = make

self.model = model

def display\_info(self):

print(f"Make: {self.make}\nModel: {self.model}")

class Car(Vehicle):

def \_\_init\_\_(self, make, model, num\_doors):

super().\_\_init\_\_(make, model)

self.num\_doors = num\_doors

def additional\_info(self):

print(f"Number of Doors: {self.num\_doors}")

class LuxuryCar(Car):

def \_\_init\_\_(self, make, model, num\_doors, features):

super().\_\_init\_\_(make, model, num\_doors)

self.features = features

def additional\_info(self):

super().additional\_info()

print(f"Luxury Features: {self.features}")

# Example usage:

car1 = LuxuryCar("BMW", "X5", 4, "Leather seats, Sunroof")

print("Car Information:")

car1.display\_info()

car1.additional\_info()

**Task02:**

class Employee:

def \_\_init\_\_(self, name, position):

self.name = name

self.position = position

def display\_info(self):

print(f"Name: {self.name}\nPosition: {self.position}")

class Manager(Employee):

def \_\_init\_\_(self, name, position, department):

super().\_\_init\_\_(name, position)

self.department = department

def additional\_info(self):

print(f"Department: {self.department}")

class Worker(Employee):

def \_\_init\_\_(self, name, position, hours\_worked):

super().\_\_init\_\_(name, position)

self.hours\_worked = hours\_worked

def additional\_info(self):

print(f"Hours Worked: {self.hours\_worked}")

manager = Manager("tanveer", "Manager", "Sales")

print("Manager Information:")

manager.display\_info()

manager.additional\_info()