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Object Oriented Programming I

Lab Sheet 8 Inheritance

1. Create a class called **Vehicle (Superclass).** Inside the superclass
    - Include two instance variables **brand** (String), and **year** (int).
    - Create a parameterized constructor including brand and year.
    - Implement Getter methods for those instance variables
    - Inside Vehicle class implement following three methods.
        - public void start()
            - System.out.println("Starting the " + **year** + " " + **brand** + " vehicle.");
        - public void stop()
            - System.out.println("Stopping the " + year + " " + brand + " vehicle.");
        - public void accelerate()
            - System.out.println("Accelerating the " + year + " " + brand + " vehicle.");

Child Class 01

Create a child class called '**Car'** and create a constructor inside the class.
Use same instance variables that use in the main class. (*hint use super key word)
Create a method called **'honk()'** and display following values inside that method.

System.out.println("Honking the horn of the " + getYear() + " " + getBrand() + " car.")

Child Class 02

- Create a child class called '**Motorcycle'** and create a constructor inside the class.
- Use same instance variables that use in the main class. (*hint use super key word)
- Create a method called **'wheelie()'** and display following values inside that method.
    - System.out.println("Popping a wheelie on the " + getYear() + " " + getBrand() + " motorcycle.")

Create a Main Class

- Create a main class called **VehicleInheritanceExample** and create separate objects for **Car** class and **Motorcycle'** and pass suitable values for Year and Brand variables.
- By using that object that is created for the Car class called start(), accelerate(), honk(), stop()
- By using that object that is created for the **Motorcycle'** class called start(), accelerate(), wheelie (), stop() accordingly.