This is a GROUP activity.

This is a graded activity. It is intended for you to apply what you learned from the discussion on inheritance, polymorphism, abstract classes and interfaces.

Part A.

1. **Draw the UML class diagram to model the following:**
    There are three kinds of **vehicles**: **bus**, **jeepney**, and **helicopter**. All vehicles have a fixed capacity: 30 for bus, 20 for jeepney, and 3 for helicopter. There is also a startPoint and endPoint strings. There should be a getters for capacity, number of passengers, startPoint, and endPoint. Create an interface **Public**. All vehicles that are public will implement this interface. In this case, the bus and jeepney are public. All Public objects should have a method to compute and return the fare, given the distance travelled in kilometers (assume the distance is an integer).
    For the bus, the fare is a fixed P30 regardless of the distance. For the jeepney, the fare is P7 for the first 4 kilometers, and an additional P1 for every extra kilometer.

2. **Implement the corresponding code based on your design.**
3. **Create a ConsoleDriver that will include declaration of an arraylist of Vehicle. Get input on type of vehicle object to be instantiated and store these in the arraylist. After all inputs are asked, (in a separate loop) display the contents of the arraylist. Information to be displayed include type of vehicle, the maximum capacity, start and end points. If public vehicle, display the fare too.**

*If you are done with the activity already, you can work on your MCO2 while waiting for Ms. Nats to visit your breakout room. But, do not discuss with your group about the MCO2. You can discuss privately with your partner only.