

*Q1 Demonstrate your understanding of the diamond problem by creating a UML diagram and coding it in C++. Your design will categorize vehicles into land vehicles, water vehicles, and amphibious vehicles.*

*Class Structure:*

*Base Class: Vehicle*

*Subclasses: WaterVehicle, LandVehicle*

*Final Class: AmphibiousVehicle (These are vehicles which work on both land and water)*

*Vehicle class has model and vehicle id as attributes and a displayInfo method.*

*Water vehicle class has engine power and hull type as attributes and displayInfo method.*

*Land vehicle class has engine power and wheel count as attributes and displayInfo method.*

*Amphibious vehicle class has protection grade and seating capacity as attributes and displayInfo method.*

*Create UML for the above mentioned scenario and also code for it.*