Problem Set on Inheritance

1. Create a base class Vehicle with fields as maxspeed, type, brand and methods as register(), getMaxSpeed(), getNumber(). Now derive classes Bicycle, Scooter and Car with appropriate modifications.

2. In the above hierarchy, add class GearedBicycle. Override method getMaxSpeed().

3. Create objects of above classes in main and store all of them into a single array of type Vehicle *allvehicles[]. Also, store all of them into a vector<Vehicle *>.

4. Using for_each, call getMaxSpeed() method for each element of the array and the vector.

5. Make sure the appropriate getMaxSpeed() method is called.