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package carproject;

class Car2 {
    private Engine engine;
    private Tire[] tires;

    public Car2() {
        engine = new Engine();
        tires = new Tire[4];

        for (int i = 0; i < 4; i++) {
            tires[i] = new Tire();
        }
    }
    //-----start Car-----
    public void startCar() {
        if (areAllTiresInflated()) {
            engine.start();
            System.out.println("Car started.");
        } else {
            System.out.println("Cannot start the car. All tires must have at least 32
psi.");
        }
    }
    //-----Stop Car-----
    public void stopCar() {
        engine.stop();
        System.out.println("Car stopped.");
    }
    //-----Restart Car-----
    public void restartCar() {
        stopCar();
        startCar();
    }

    private boolean areAllTiresInflated() {
        for (Tire tire : tires) {
            if (tire.getPressure() < 32) {
                return false;
            }
        }
        return true;
    }

    public Engine getEngine() {
        return engine;
    }

    public Tire[] getTires() {
        return tires;
    }

    public void setTirePressure(int tireIndex, int pressure) {
        tires[tireIndex].setPressure(pressure);
    }
}

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    }

    public static void main(String[] args) {
        Car2 raceCar = new Car2();

        // Inflate all tires to 35 psi
        for (int i = 0; i < 4; i++) {
            raceCar.setTirePressure(i, 35);
        }

        raceCar.startCar();
        raceCar.getEngine().setSpeed(60); // Set the speed to 60 mph
        raceCar.stopCar();

        // Print out car information
        System.out.println("Car Information:");
        System.out.println("Engine Speed: " + raceCar.getEngine().getSpeed() + "
mph");
        for (int i = 0; i < 4; i++) {
            System.out.println("Tire " + (i + 1) + " Pressure: " + raceCar.getTires()
[i].getPressure() + " psi");
        }
    }

    class Engine {
        private int speed;

        public void start() {
            System.out.println("Engine started.");
        }

        public void stop() {
            System.out.println("Engine stopped.");
        }

        public int getSpeed() {
            return speed;
        }

        public void setSpeed(int speed) {
            this.speed = Math.max(1, Math.min(60, speed)); // Limit the speed between 1
and 60 mph
        }
    }

    class Tire {
        private int pressure;

        public int getPressure() {
            return pressure;
        }
    }

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}  
  
public void setPressure(int pressure) {  
    this.pressure = pressure;  
}  
}
```