5. JUnit program that demonstrates test interfaces and default methods:

import org.junit.jupiter.api.\*;

public interface VehicleTest {

@Test

default void testVehicleSpeed() {

Vehicle vehicle = createVehicle();

int speed = vehicle.getSpeed();

Assertions.assertTrue(speed > 0, "Vehicle speed should be greater than zero");

}

Vehicle createVehicle();

}

public class CarTest implements VehicleTest {

@Override

public Vehicle createVehicle() {

return new Car();

}

@Test

public void testCarModel() {

Car car = new Car();

String model = car.getModel();

Assertions.assertNotNull(model, "Car model should not be null");

}

}

public class BikeTest implements VehicleTest {

@Override

public Vehicle createVehicle() {

return new Bike();

}

@Test

public void testBikeType() {

Bike bike = new Bike();

String type = bike.getType();

Assertions.assertNotNull(type, "Bike type should not be null");

}

}