LOMBOK TASK FOR VOLUNTEERS

Akademia Finansów i Biznesu Vistula
Studia globalnych możliwości

mgr inż. Dominik Bielecki
email: d.bielecki@vistula.edu.pl

LOMBOK TASK FOR VOLUNTEERS

The task involves using the Lombok library in the task in which we built our model class using the example of Car (Labs4, Task2).
The task is about this:
- adding the Lombok library to Intellij and the project,
- removing all methods, constructor, etc. from the Car class - we only leave the fields,
- in a class with the main method, adding a second object, using the eqauls() and hashCode() methods on these two objects.
- the entire code above should compile (thanks to the Lombok library and the use of appropriate annotations) and print information to the console as in the printScreen on the next slide. Please note that the eqauls() method returns **true**, and the hashCode() method returns the **same value** - even though we are **comparing two different** objects.

Ps. I deliberately do not show what is before the 10th line of code - this is part of your task.

Ps.2. Lombok Libraries is one of the basic external libraries used in commercial projects. Knowing and using it significantly shortens our code without losing its readability. It's really worth knowing and using it - if we are thinking about commercial programming.

Ps.3. Moreover, other languages have similar libraries designed to reduce boilerplate code, for Python it is Paprika, and for C# it is AutoFixture.

More about Lombok can be found on the official website of this project: https://projectlombok.org/

LOMBOK TASK FOR VOLUNTEERS

```java
public class CarWithLombok {
    private String model;
    private String brand;
    private int year;
    private int price;
    private String color;
    private int quantity;
}

class CarDemoWithLombok {
    public static void main(String[] args) {

        CarWithLombok CarWithLombok1 = new CarWithLombok( model: "GLE", brand: "Mercedes", year: 2020, price: 350_000, color: "white", quantity: 5);
        CarWithLombok CarWithLombok2 = new CarWithLombok( model: "GLC", brand: "Mercedes", year: 2023, price: 200_000, color: "silver", quantity: 3);
        System.out.println(CarWithLombok1);
        System.out.println(CarWithLombok2);
        System.out.println(CarWithLombok1.getColor());
        int year = CarWithLombok1.getYear();
        CarWithLombok1.setColor("black");
        System.out.println("Are these objects equal? " + CarWithLombok1.equals(CarWithLombok2));
        System.out.println("The HashCode of this object is: " + CarWithLombok2.hashCode());
        System.out.println("The HashCode of this object is: " + CarWithLombok1.hashCode());
    }
}
```

Run: CarDemoWithLombok

```
C:\Users\biele\.jdks\openjdk-18.0.2\bin\java.exe "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA 2023.2.2\lib\idea_rt.jar=50810:C:\Pro
CarWithLombok(model=GLE, brand=Mercedes, year=2020, price=350000, color=white)
CarWithLombok(model=GLC, brand=Mercedes, year=2023, price=200000, color=silver)
white
Are these objects equal? true
The HashCode of this object is: -440739023
The HashCode of this object is: -440739023
```