Exercises:

1. Name three examples of aggregations and specializations found in the reality.
2. Implement the classes *Date* and *Appointment*. – They should be related to each other. – Which relation did you choose? Document your idea in a clear manner.
3. Implement the class hierarchy with *Car*, *Bus*, *VintageCar* etc. as far as needed (as far as you wish :)). – For following tasks use your freedom and fantasy, there are many ways to implement them and there is basically no wrong solution. If appropriate you can also apply *@Override*s.
   a) Create a class diagram. Just do it by hand with a pencil, which shows the class hierarchy as far as you wish. Hint: assume, that you have to modify the diagram (erasing and redrawing of architectural parts), to adapt it to the changes you have/want to do.→ This is just the reality using UML!
   b) Additionally add the idea of *Tyre*s in your design. Assume, that a Car can have multiple *Tyre*s.
   c) Implement the method *getPressure()*, which retrieves the pressure of *Tyre*s.
4. What is array-covariance? Explain the term and also the problems with covariant array with examples. – Feel free to consult other online sources to sharpen your understanding of the concept.

Remarks:

- As always.