

#### Exercises:

1. In an earlier exercise, we had to add a ctor to *Date*, that allows the caller to specify, that each access and each modification of the encapsulated field should be logged to the console. – Our new task is to radically extend this behavior: the user should be able to pass an object to the ctor, which itself acts as a target for those log-calls. Implement this in a way, so that we can pass objects to log to the console, to a file and to any other target we might have in future! Tip: use an [interface](#) to implement this idea. – Clearly document how it works! Also add unit tests!
2. Implement a decorator for *Date*, which is able to do the same as in (1). What are the benefits of the decorator pattern in comparison to the solution in (1)?
3. The types *RealNumber* and *ComplexNumber* can modeled with LSP in mind. – Explain this idea, also explain, how it hurts the DIP.

#### Remarks:

- As always.