Closures and High-order Functions
Abstract

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Advantages of high-order functions can be used in the wide spectrum of programming languages, though they are more natural in functional ones or those, where function acts as a first-class citizen. The similar we can say about closures. We will show that these two methods may make our code more understandable, readable or reusable.

We will briefly describe benefits of closures and high-order functions at the beginning of the lecture. Next, we will aim to the principles of nested and anonymous functions (also known as lambda functions).

The main part of the lecture will be focused on approach how closures and high-order functions can be implemented. We are also going to present several practical examples in some functional and non-functional programming languages throughout the lecture.