

# Utilities in C++ Standard Library

In this part of the course, we will delve into some of the features that further enhance the the usability of C++.

Utilities are useful tools which can be used in many different contexts. They are not bound to a typical domain. That sentence holds for the functions and libraries of this chapter. I explain to you functions which you can apply on arbitrary values or functions which you can use to create new functions and binds them to variables. You can store arbitrary values of arbitrary types in pairs and tuples, or you can build references to arbitrary values. Smart pointers are your tool to implement automatic memory management in C++. To get information about your types, use the type-traits library.

In the next few chapters we will study:

- Useful Functions
- Adaptors for Functions
- Pairs
- Tuples
- Reference Wrappers
- Smart Pointers
- Type Traits
- Time Library
- Values of Variables