

# Text Processing

C++ handles text by using `std::string` and `std::string_view` utilities.

## WE'LL COVER THE FOLLOWING ^

- String
- String View
- Regular Expression

With strings and regular expressions, C++ has two powerful libraries to process text.

## String #

`std::string` possesses a rich collection of methods to analyze and modify its text. Because it has a lot in common with an `std::vector` of characters, the algorithms of the STL can be used for `std::string`. `std::string` is the successor of the C string but a lot easier and safer to use. C++ strings manage their memory themselves.

## String View #

In contrast to a `std::string` a `std::string_view` is quite cheap to copy. A `std::string_view` is a non-owning reference to a `std::string`.

## Regular Expression #

**Regular expression** is a language for describing text patterns. You can use regular expressions to determine whether a text pattern is present once or more times in a particular text. But that's not all. Regular expressions can be used to replace the content of the matched patterns with a text.

In the next lesson, we will talk about input and output in the C++ Standard Library.

