

# Character Types

This lesson will explain how regex identifies the different types of text in C++.

The type of the text determines the character type of the regular expression, the type of search result and the type of action with the search result.

The table shows the four different combinations.

Text type	Regular expression type	Result type	Action type
<code>const char*</code>	<code>std::regex</code>	<code>std::smatch</code>	<code>std::regex_search</code>
<code>std::string</code>	<code>std::regex</code>	<code>std::smatch</code>	<code>std::regex_search</code>
<code>const wchar_t*</code>	<code>std::wregex</code>	<code>std::wcmatch</code>	<code>std::wregex_search</code>
<code>std::wstring</code>	<code>std::wregex</code>	<code>std::wsmatch</code>	<code>std::wregex_search</code>

## Combinations of type of text, regular expression, search result and action

The program shown in the [Search](#) section of this chapter provides the four combinations in detail.

