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Programming in C++
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C++ Standard Library Headers

The C++ Standard Library is divided into many portions, each with its own header. The headers contain the function prototypes for the related functions that form each portion of the library. The headers also contain definitions of various class types and functions, as well as constants needed by those functions. A header "instructs" the compiler on how to interface with library and user-written components.

Find some common C++ Standard Library headers

Standard Library Header	Explanation
<iostream>	Contains function prototypes for the C++ standard input and output functions
<iomanip>	Contains function prototypes for stream manipulators that format streams of data.
<cmath>	Contains function prototypes for math library functions
<cstdlib>	Contains function prototypes for conversions of numbers to text, text to numbers, memory allocation, random numbers and various other utility functions.
<ctime>	Contains function prototypes and types for manipulating the time and date.
<vector>, <list>, <deque>, <queue>, <stack>, <map>, <set>, <bitset>	These headers contain classes that implement the C++ Standard Library containers. Containers store data during a program's execution.
<cctype>	Contains function prototypes for functions that test characters for certain properties (such as whether the character is a digit or a punctuation), and function prototypes for functions that can be used to convert lowercase letters to uppercase letters and vice versa.
<cstring>	Contains function prototypes for C-style string-processing functions.
<typeinfo>	Contains classes for runtime type identification (determining data types at execution time).
<exception>,	These headers contain classes that are used for

Standard Library Header	Explanation
<stdexcept>	exception handling
<memory>	Contains classes and functions used by the C++ Standard Library to allocate memory to the C++ Standard Library containers.
<fstream>	Contains function prototypes for functions that perform input from and output to files on disk
<string>	Contains the definition of class string from the C++ Standard Library
<sstream>	Contains function prototypes for functions that perform input from strings in memory and output to strings in memory
<functional>	Contains classes and functions used by C++ Standard Library algorithms.
<iterator>	Contains classes for accessing data in the C++ Standard Library containers.
<algorithm>	Contains functions for manipulating data in C++ Standard Library containers.
<cassert>	Contains macros for adding diagnostics that aid program debugging.
<cfloat>	Contains the floating-point size limits of the system.
<climits>	Contains the integral size limits of the system.
<cstdio>	Contains function prototypes for the C-style standard input/output library functions.
<locale>	Contains classes and functions normally used by stream processing to process data in the natural form for different languages (e.g., monetary, formats, sorting strings, character presentation, etc.).
<limits>	Contains classes for defining the numerical data type limits on each computer platform.
<utility>	Contains classes and functions that are used by many C++ Standard Library headers.