# C Standard Library header files

The interface of C standard library is defined by the following collection of headers.

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| **<assert.h>** | Conditionally compiled macro that compares its argument to zero |
| **<complex.h>** (C99) | Complex number arithmetic |
| **<ctype.h>** | Functions to determine the type contained in character data |
| **<errno.h>** | Macros reporting error conditions |
| **<fenv.h>** (C99) | Floating-point environment |
| **<float.h>** | Limits of floating-point types |
| **<inttypes.h>** (C99) | Format conversion of integer types |
| **<iso646.h>** (C95) | Alternative operator spellings |
| **<limits.h>** | Ranges of integer types |
| **<locale.h>** | Localization utilities |
| **<math.h>** | Common mathematics functions |
| **<setjmp.h>** | Nonlocal jumps |
| **<signal.h>** | Signal handling |
| **<stdalign.h>** (C11) | alignas and alignof convenience macros |
| **<stdarg.h>** | Variable arguments |
| **<stdatomic.h>** (C11) | Atomic operations |
| **<stdbool.h>** (C99) | Macros for boolean type |
| **<stddef.h>** | Common macro definitions |
| **<stdint.h>** (C99) | Fixed-width integer types |
| **<stdio.h>** | Input/output |
| **<stdlib.h>** | General utilities: memory management, program utilities, string conversions, random numbers, algorithms |
| **<stdnoreturn.h>** (C11) | noreturn convenience macro |
| **<string.h>** | String handling |
| **<tgmath.h>** (C99) | Type-generic math (macros wrapping math.h and complex.h) |
| **<threads.h>** (C11) | Thread library |
| **<time.h>** | Time/date utilities |
| **<uchar.h>** (C11) | UTF-16 and UTF-32 character utilities |
| **<wchar.h>** (C95) | Extended multibyte and wide character utilities |
| **<wctype.h>** (C95) | Functions to determine the type contained in wide character data |

## References

- C17 standard (ISO/IEC 9899:2018):

    - 7.1.2 Standard headers (p: 131-132)

- C11 standard (ISO/IEC 9899:2011):

    - 7.1.2 Standard headers (p: 181-182)

- C99 standard (ISO/IEC 9899:1999):

    - 7.1.2 Standard headers (p: 165)

- C89/C90 standard (ISO/IEC 9899:1990):

    - 4.1.2 Standard headers

## See also

**C++ documentation** for **C++ Standard Library header files**