

# abort

Defined in header <stdlib.h>

<code>void abort(void);</code>	(until C11)
<code>_Noreturn void abort(void);</code>	(since C11)

Causes abnormal program termination unless SIGABRT is being caught by a signal handler passed to `signal` and the handler does not return.

Functions passed to `atexit()` are not called. Whether open resources such as files are closed is implementation defined. An implementation defined status is returned to the host environment that indicates unsuccessful execution.

## Parameters

(none)

## Return value

(none)

## Notes

POSIX specifies (<http://pubs.opengroup.org/onlinepubs/9699919799/functions/abort.html>) that the `abort()` function overrides blocking or ignoring the SIGABRT signal.

Some compiler intrinsics, e.g. `__builtin_trap` (<https://gcc.gnu.org/onlinedocs/gcc/Other-Builtins.html>) (gcc, clang, and icc) or `__debugbreak` (<https://docs.microsoft.com/en-us/cpp/intrinsics/debugbreak?view=msvc-160>) (msvc), can be used to terminate the program as fast as possible.

## Example

Run this code

```
#include <stdio.h>
#include <stdlib.h>

int main(void)
{
    FILE *fp = fopen("data.txt", "r");
    if (fp == NULL) {
        fprintf(stderr, "error opening file data.txt in function main()\n");
        abort();
    }

    /* Normal processing continues here. */
    fclose(fp);
    printf("Normal Return\n");
    return 0;
}
```

Output:

```
error opening file data.txt in function main()
```

## References

- C17 standard (ISO/IEC 9899:2018):
  - 7.22.4.1 The abort function (p: 255)
- C11 standard (ISO/IEC 9899:2011):
  - 7.22.4.1 The abort function (p: 350)
- C99 standard (ISO/IEC 9899:1999):

- 7.20.4.1 The abort function (p: 315)
- C89/C90 standard (ISO/IEC 9899:1990):
  - 4.10.4.1 The abort function

See also

<b>exit</b>	causes normal program termination with cleaning up (function)
<b>atexit</b>	registers a function to be called on exit() invocation (function)
<b>quick_exit</b> (C11)	causes normal program termination without completely cleaning up (function)

C++ documentation for **abort**

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