

NAME

`malloc_trim` - release free memory from the top of the heap

SYNOPSIS

```
#include <malloc.h>

int malloc_trim(size_t pad);
```

DESCRIPTION

The `malloc_trim()` function attempts to release free memory at the top of the heap (by calling `sbrk(2)` with a suitable argument).

The `pad` argument specifies the amount of free space to leave untrimmed at the top of the heap. If this argument is 0, only the minimum amount of memory is maintained at the top of the heap (i.e., one page or less). A nonzero argument can be used to maintain some trailing space at the top of the heap in order to allow future allocations to be made without having to extend the heap with `sbrk(2)`.

RETURN VALUE

The `malloc_trim()` function returns 1 if memory was actually released back to the system, or 0 if it was not possible to release any memory.

ERRORS

No errors are defined.

CONFORMING TO

This function is a GNU extension.

NOTES

This function is automatically called by `free(3)` in certain circumstances; see the discussion of `M_TOP_PAD` and `M_TRIM_THRESHOLD` in `mallopt(3)`.

This function cannot release free memory located at places other than the top of the heap.

This function releases only memory in the main arena.

SEE ALSO

`sbrk(2)`, `malloc(3)`, `mallopt(3)`

COLOPHON

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