

BREAK (II)

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NAME

break, brk, sbrk — change core allocation

SYNOPSIS

(break = 17.)
sys break; addr
char *brk(addr)
char *sbrk(incr)

DESCRIPTION

Break sets the system's idea of the lowest location not used by the program (called the break) to *addr* (rounded up to the next multiple of 64 bytes). Locations greater than *addr* and below the stack pointer are not in the address space and will thus cause a memory violation if accessed.

From C, *brk* will set the break to *addr*. The old break is returned.

In the alternate entry *sbrk*, *incr* more bytes are added to the program's data space and a pointer to the start of the new area is returned.

When a program begins execution via *exec* the break is set at the highest location defined by the program and data storage areas. Ordinarily, therefore, only programs with growing data areas need to use *break*.

SEE ALSO

exec (II), alloc (III), end (III)

DIAGNOSTICS

The c-bit is set if the program requests more memory than the system limit or if more than 8 segmentation registers would be required to implement the break. From C, -1 is returned for these errors.

BUGS

Setting the break in the range 0177700 to 0177777 is the same as setting it to zero.