NAME

size – print section sizes in bytes of object files

SYNOPSIS

size [**–f**] [**–F**] [**–n**] [**–o**] [**–V**] [**–x**] *filename* . . .

DESCRIPTION

The **size** command produces segment or section size information in bytes for each loaded section in ELF or COFF object files. **size** prints out the size of the text, data, and bss (uninitialized data) segments (or sections) and their total.

size processes ELF and COFF object files entered on the command line. If an archive file is input to the **size** command, the information for each object file in the archive is displayed.

When calculating segment information, the **size** command prints out the total file size of the non-writable segments, the total file size of the writable segments, and the total memory size of the writable segments minus the total file size of the writable segments.

If it cannot calculate segment information, **size** calculates section information. When calculating section information, it prints out the total size of sections that are allocatable, non-writable, and not NOBITS, the total size of the sections that are allocatable, writable, and not NOBITS, and the total size of the writable sections of type NOBITS. (NOBITS sections do not actually take up space in the *filename*.)

If **size** cannot calculate either segment or section information, it prints an error message and stops processing the file.

OPTIONS

–f Print out the size of each allocatable section, the name of the section, and the total of the section sizes. If there is no section data, **size** prints out an error message and stops processing the file.

–F Print out the size of each loadable segment, the permission flags of the segment, then the total of the loadable segment sizes. If there is no segment data, **size** prints an error message and stops processing the file.

–n Print out non-loadable segment or non-allocatable section sizes. If segment data exists, **size** prints out the memory size of each loadable segment or file size of each non-loadable segment, the permission flags, and the total size of the segments. If there is no segment data, **size** prints out, for each allocatable and non-allocatable section, the memory size, the section name, and the total size of the sections. If there is no segment or section data, **size** prints an error message and stops processing.

–o Print numbers in octal, not decimal.

–V Print the version information for the **size** command on the standard error output.

–x Print numbers in hexadecimal; not decimal.

EXAMPLES

The examples below are typical **size** output.

example% size *filename*
2724 + 88 + 0 = 2812

example% size –**f** *filename*
26(.text) + 5(.init) + 5(.fini) = 36

example% size –**F** *filename*
2724(r-x) + 88(rwx) + 0(rwx) = 2812 *(If statically linked)*

SEE ALSO

as(1), **cc**(1B), **ld**(1), **a.out**(4), **ar**(4)

NOTES

Since the size of bss sections is not known until link-edit time, the **size** command will not give the true total size of pre-linked objects.