

**NAME**

*atof*, *atoi*, *atol* — convert ASCII to numbers

**SYNOPSIS**

**double** *atof* (*nptr*)

**char** \**nptr*;

**atoi** (*nptr*)

**char** \**nptr*;

**long** *atoi* (*nptr*)

**char** \**nptr*;

**DESCRIPTION**

These functions convert a string pointed to by *nptr* to floating, integer, and long integer representation respectively. The first unrecognized character ends the string.

*Atof* converts a string to a floating number. *Nptr* should point to a string containing an optional minus sign followed by a string of digits optionally containing one decimal point, then followed optionally by the letter *e*, followed by a signed integer.

*Atoi* and *atol* recognize an optional string of tabs and spaces, an optional '-' and then an unbroken string of digits.

**DIAGNOSTICS**

There are none; overflow results in a very large number and garbage characters terminate the scan.

**BUGS**

*Atof* should accept initial +, initial blanks, and E for e. Overflow should be signaled.