NAME

ctime, localtime, gmtime − convert date and time to ASCII

SYNOPSIS

char *ctime(tvec)
int tvec[2];

[from Fortran]
double precision ctime

int *localtime(tvec)
int tvec[2];

int *gmtime(tvec)
int tvec[2];

DESCRIPTION

Ctime converts a time in the vector *tvec* such as returned by *time*(II) into ASCII and returns a pointer to a character string in the form

  Sun Sep 16 01:03:52 1973\n\0

All the fields have constant width.

The *localtime* and *gmtime* entries return pointers to integer vectors containing the broken-down time. *Localtime* corrects for the time zone and possible daylight savings time; *gmtime* converts directly to GMT, which is the time UNIX uses. The value is a pointer to an array whose components are

0	seconds
1	minutes
2	hours
3	day of the month (1-31)
4	month (0-11)
5	year − 1900
6	day of the week (Sunday = 0)
7	day of the year (0-365)
8	Daylight Saving Time flag if non-zero

The external variable *timezone* contains the difference, in seconds, between GMT and local standard time (in EST, is 5*60*60); the external variable *daylight* is non-zero if the standard U.S.A. Daylight Savings Time conversion should be applied. The program knows about the peculiarities of this conversion in 1974 and 1975; if necessary, a table for these years can be extended.

A routine named *ctime* is also available from Fortran. Actually it more resembles the *time*(II) system entry in that it returns the number of seconds since the epoch 0000 GMT Jan. 1, 1970 (as a floating-point number).

SEE ALSO

time(II), regen(VIII)