NAME

ctime − convert date and time to ASCII

SYNOPSIS

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

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*(2) into ASCII and returns a pointer to a character string in the form:

Sun Sep 16 01:03:52 1973

All the fields have constant width.

The *localtime* and *gmtime* entries return integer vectors to 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 integer 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 routine knows about Daylight Savings Time in the U.S.A, including the peculiarities of the conversion in 1974 and 1975; if necesary, a table for these years can be extended.

SEE ALSO

time(2)

BUGS

The algorithm fails in Saudi Arabia, which runs on Solar Time.