C library function - asctime()

Description

The C library function **char *asctime(const struct tm *timeptr)** returns a pointer to a string which represents the day and time of the structure **struct timeptr**.

Declaration

Following is the declaration for asctime() function.

```
char *asctime(const struct tm *timeptr)
```

Parameters

The **timeptr** is a pointer to tm structure that contains a calendar time broken down into its components as shown below –

```
struct tm {
                    /* seconds, range 0 to 59
                                                        */
  int tm_sec;
                    /* minutes, range 0 to 59
  int tm_min;
                     /* hours, range 0 to 23
  int tm_hour;
  int tm_mday;
                     /* day of the month, range 1 to 31 */
  int tm_mon;
                     /* month, range 0 to 11
                                                        */
                     /* The number of years since 1900
                                                        */
  int tm_year;
                    /* day of the week, range 0 to 6
  int tm_wday;
                     /* day in the year, range 0 to 365
  int tm_yday;
  int tm_isdst;
                     /* daylight saving time
                                                        */
};
```

Return Value

This function returns a C string containing the date and time information in a human-readable format **Www Mmm dd hh:mm:ss yyyy**, where *Www* is the weekday, *Mmm* the month in letters, *dd* the day of the month, *hh:mm:ss* the time, and *yyyy* the year.

Example

The following example shows the usage of asctime() function.

```
#include <stdio.h>
#include <string.h>
#include <time.h>
```

```
int main () {
    struct tm t;

    t.tm_sec = 10;
    t.tm_min = 10;
    t.tm_hour = 6;
    t.tm_mday = 25;
    t.tm_mon = 2;
    t.tm_year = 89;
    t.tm_wday = 6;

puts(asctime(&t));

return(0);
}
```

Let us compile and run the above program that will produce the following result -

```
Sat Mar 25 06:10:10 1989
```