

C library function - localtime()

Description

The C library function **struct tm *localtime(const time_t *timer)** uses the time pointed by **timer** to fill a **tm** structure with the values that represent the corresponding local time. The value of **timer** is broken up into the structure **tm** and expressed in the local time zone.

Declaration

Following is the declaration for localtime() function.

```
struct tm *localtime(const time_t *timer)
```

Parameters

- **timer** – This is the pointer to a time_t value representing a calendar time.

Return Value

This function returns a pointer to a **tm** structure with the time information filled in. Following is the tm structure information –

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

Example

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

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

```
int main () {  
    time_t rawtime;  
    struct tm *info;  
    time( &rawtime );  
    info = localtime( &rawtime );  
    printf("Current local time and date: %s", asctime(info));  
    return(0);  
}
```

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

Current local time and date: Thu Aug 23 09:12:05 2012