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
```