

Description

The C library function **double difftime(time_t time1, time_t time2)** returns the difference of seconds between **time1** and **time2** i.e. **(time1 - time2)**. The two times are specified in calendar time, which represents the time elapsed since the Epoch (00:00:00 on January 1, 1970, Coordinated Universal Time (UTC)).

Declaration

Following is the declaration for difftime() function.

```
double difftime(time_t time1, time_t time2)
```

Parameters

time1 -- This is time_t object for end time.

time2 -- This is time_t object for start time.

Return Value

This function returns the difference of two times (time2 - time1) as a double value.

Example

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

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

int main ()
{
    time_t start_t, end_t;
    double diff_t;

    printf("Starting of the program...\n");
    time(&start_t);

    printf("Sleeping for 5 seconds...\n");
    sleep(5);

    time(&end_t);
    diff_t = difftime(end_t, start_t);

    printf("Execution time = %f\n", diff_t);
    printf("Exiting of the program...\n");
```

```
    return(0);  
}
```

Let us compile and run the above program, this will produce the following result:

```
Starting of the program...  
Sleeping for 5 seconds...  
Execution time = 5.000000  
Exiting of the program...
```