```
time(&cur_time);
```

where `cur_time` is a variable of type `time_t`.

difftime

The `difftime` function returns the difference between `time0` (the earlier time) and `time1`, measured in seconds. Thus, to compute the actual running time of a program (not the processor time), we could use the following code:

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

int main(void)
{
  time_t start_time = time(NULL);
  …
  printf("Running time: %g sec.\n",
         difftime(time(NULL), start_time));
  return 0;
}
```

mktime

The `mktime` function converts a broken-down time (stored in the structure that its argument points to) into a calendar time, which it then returns. As a side effect, `mktime` adjusts the members of the structure according to the following rules:

- `mktime` changes any members whose values aren't within their legal ranges (see Table 26.1). Those alterations may in turn require changes to other members. If `tm_sec` is too large, for example, `mktime` reduces it to the proper range (0–59), adding the extra minutes to `tm_min`. If `tm_min` is now too large, `mktime` reduces it and adds the extra hours to `tm_hour`. If necessary, the process will continue to the `tm_mday`, `tm_mon`, and `tm_year` members.
- After adjusting the other members of the structure (if necessary), `mktime` sets `tm_wday` (day of the week) and `tm_yday` (day of the year) to their correct values. There's never any need to initialize the values of `tm_wday` and `tm_yday` before calling `mktime`; it ignores the original values of these members.

`mktime`'s ability to adjust the members of a `tm` structure makes it useful for time-related arithmetic. As a example, let's use `mktime` to answer the following question: If the 2012 Olympics begin on July 27 and end 16 days later, what is the ending date? We'll start by storing July 27, 2012 in a `tm` structure:

```
struct tm t;

t.tm_mday = 27;
t.tm_mon = 6;       /* July */
t.tm_year = 112;    /* 2012 */
```

We'll also initialize the other members of the structure (except `tm_wday` and `tm_yday`) to ensure that they don't contain undefined values that could affect the answer: