

gmtime : 标准 UTC +0000 时间

localtime : 本地时间 和时区 有关

```
utc = gmtime(&tmpcal_ptr);
```

```
local = localtime(&tmpcal_ptr);
```

```
printf("after gmtime, the time is:\n%d:%d:%d", tmp_ptr->tm_hour,  
tmp_ptr->tm_min, tmp_ptr->tm_sec);
```

```
printf("after localtime, the time is:\n%d:%d:%d", tmp_ptr->tm_hour, tmp_ptr->tm_min, tmp_ptr->tm_sec);
```

不能这样获取，这样的话 utc 会被 local 覆盖掉，使 utc 和 local 一样

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

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

```
int main(int argc, char **argv)
```

```
{
```

```
time_t tmpcal_ptr = {0};
```

```
struct tm *tmp_ptr = NULL;
```

```
tmpcal_ptr = time(NULL);
```

```
printf("tmpcal_ptr=%d\n", tmpcal_ptr);
```

```
tmp_ptr = gmtime(&tmpcal_ptr);
```

```
printf("after gmtime, the time is:\n%d:%d:%d", tmp_ptr->tm_hour, tmp_ptr->tm_min, tmp_ptr->tm_sec);
```

```
tmp_ptr = localtime(&tmpcal_ptr);
```

```
printf("after localtime, the time is:\n%d:%d:%d", tmp_ptr->tm_hour, tmp_ptr->tm_min, tmp_ptr->tm_sec);
```

```
return 0;
```

```
}
```

运行结果如下：

```
[carl@Fedora project]$ date
Fri Apr 12 15:46:39 CST 2013
[carl@Fedora project]$ gcc date_time.c
[carl@Fedora project]$ ./a.out
tmpcal_ptr=1365752806
after gmtime, the time is:
7:46:46
after localtime, the time is:
15:46:46
[carl@Fedora project]$
```