

所使用的的头文件如下：

1. `#include "iostream"`
2. `#include "time.h"`
3. `#include "string.h"`
4. `|`
5. `using namespace std;`

代码如下：

1. `int standard_to_stamp(char *str_time)`
2. `{`
3.  `struct tm stm;`
4.  `int iY, iM, iD, iH, iMin, iS;`
5. `|`
6.  `memset(&stm,0,sizeof(stm));`
7.  `iY = atoi(str_time);`
8.  `iM = atoi(str_time+5);`
9.  `iD = atoi(str_time+8);`
10.  `iH = atoi(str_time+11);`
11.  `iMin = atoi(str_time+14);`
12.  `iS = atoi(str_time+17);`
13. `|`
14.  `stm.tm_year=iY-1900;`
15.  `stm.tm_mon=iM-1;`
16.  `stm.tm_mday=iD;`
17.  `stm.tm_hour=iH;`
18.  `stm.tm_min=iMin;`
19.  `stm.tm_sec=iS;`
20. `|`
21.  `printf("%d-%0d-%0d %0d:%0d:%0d\n", iY, iM, iD, iH, iMin, iS); //标准时间格式例如: 2016:08:02 12:12:30`
22.  `return (int)mktime(&stm);`
23. `}`
24. `|`
25. `int main()`

```

26. {
27.     int stampTime = standard_to_stamp("2016:08:02 12:12:30");
28.     cout << stampTime << endl;
29. }
30. return 0;
31. }

```

注：里面的atoi(s+5); +8、+11、+14、+17表示的是传入参数的格式中每个数字距离字符串开头的长度；

运行结果如下：

```

2016-8-2 12:12:30
1470111150

```

## C++学习笔记3----时间与时间戳

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自 1970 年 1 月 1 日以来经过的秒数：

time\_t time1 = time(0); //这里获取到的其实就是一个long类型的时间戳，是秒级别的，非毫秒级别

```

time_t time1 = time(0);
cout << "time1 = " << time1 << endl; //1498122787
char * strTime = ctime(&time1);
cout << "strTime = " << strTime << endl; //Thu Jun 22 17:13:07
2017

```

```

time_t startTime = 1498122787;
double betweenSecond = difftime(time1, startTime); //该函数返回
time1 和 time2 之间相差的秒数。
cout << "betweenSecond = " << betweenSecond << endl; //Thu Jun
22 17:13:07 2017

```

## 1. 时间戳转格式化

```
time_t t = time(0);
struct tm *p;
p=gmtime(&t);
char s[100];
strftime(s, sizeof(s), "%Y-%m-%d %H:%M:%S", p);
printf("%d: %s\n", (long)t, s); //1498124250: 2017-06-22 09:37:30
```

## 2. 格式化转时间戳

```
long GetTick(char *str_time)
{
    struct tm stm;
    int iY, iM, iD, iH, iMin, iS;

    memset(&stm, 0, sizeof(stm));

    iY = atoi(str_time);
    iM = atoi(str_time+5);
    iD = atoi(str_time+8);
    iH = atoi(str_time+11);
    iMin = atoi(str_time+14);
    iS = atoi(str_time+17);

    stm.tm_year=iY-1900;
    stm.tm_mon=iM-1;
    stm.tm_mday=iD;
    stm.tm_hour=iH;
    stm.tm_min=iMin;
    stm.tm_sec=iS;
    return mktime(&stm);
}

int main()
{
    char str_time[19];
    printf("请输入时间:"); /* (格式:2011-12-31 11:43:07) */
    gets(str_time);
    printf("%ld\n", GetTick(str_time));
    return 0;
}
```