

Hack postgres Source Code: Vol I

Chapter 1 : C & Rust

1.45 Time Library - C

`time.h` consists of variable `struct tm`. Calendar time can be built using the members of this structure.

```
struct tm {
    int tm_sec;           // range 0 to 59
    int tm_min;           // range 0 to 59
    int tm_hour;          // range 0 to 23
    int tm_mday;          // range 1 to 31
    int tm_mon;           // range 0 to 11
    int tm_year;          // The number of years since 1900
    int tm_wday;          // range 0 to 6
    int tm_yday;          // range 0 to 365
    int tm_isdst;         // saving time
```

There is a function called `asctime` which takes address of this structure and returns constructed time in the form of string. So, basically, this function takes address of structure and returns a character pointer.

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

int main () {
    struct tm t;

    t.tm_sec    = 0;
    t.tm_min    = 0;
    t.tm_hour   = 12;
    t.tm_mday   = 5;
    t.tm_mon    = 4;
    t.tm_year   = 122;

    puts(asctime(&t));

    return(0);
}
```