

CSC3320 System Level Programming

Lab Assignment 10 - (In-Lab)

Rafid Shaon

Purpose: Learn how to use the pointers in a C function.

The following program **splitTime.c** is used to split a time in seconds into the equivalent time in hours (0-23), minutes (0-59), and seconds (0-59), respectively. But it is incomplete. Please complete the program.

Sample output:

```
Enter seconds:2345
Converted format 0 hour 39 mins 5 secs

Enter seconds:3601
Converted format 1 hour 0 mins 1 secs
```

```
#include<stdio.h>

// Write the declaration of function split_time

int main(){
    int n,hr,min,sec;
    printf("Enter seconds:");
    scanf("%d",&n);

    /* Write the statement to call split_time */

    printf("Converted format: %d hour %d mins %d secs", /*
Write the corresponding expressions */ );
    return 0;
}

void split_time(long total_sec, int *hr, int *min, int
*sec){ /* Write the statements to calculate hr, min and
sec */
}
```

```
[rshaon1@gsuad.gsu.edu@snowball ~]$ cat splitTime.c
#include<stdio.h>

void split_time(long total_sec, int *hr, int *min, int *sec){
total_sec = total_sec % (60 * 60);
*hr = (int)(total_sec / (60 * 60));
*min = (int)(total_sec / 60);
*sec = (total_sec % 60);
}

int main(){
int n, hr, min, sec;
printf("Enter seconds: ");
scanf("%d", &n);
split_time(n, &hr, &min, &sec);
printf("Converted format: %d hour %d mins %d secs \n", hr, min, sec);
return 0;
}
[rshaon1@gsuad.gsu.edu@snowball ~]$ █
```

```
[rshaon1@gsuad.gsu.edu@snowball ~]$ nano splitTime.c
[rshaon1@gsuad.gsu.edu@snowball ~]$ gcc -Wall splitTime.c -o splitTime
[rshaon1@gsuad.gsu.edu@snowball ~]$ ./splitTime
Enter seconds: 2345
Converted format: 0 hour 39 mins 5 secs
[rshaon1@gsuad.gsu.edu@snowball ~]$ ./splitTime
Enter seconds: 3601
Converted format: 0 hour 0 mins 1 secs
[rshaon1@gsuad.gsu.edu@snowball ~]$
```

Submission:

- Upload the C files **splitTime.c** to the folder named “**Lab 10_ InLab**” to the google classroom.