EE231002 Introduction to Programming

Lab03. Day of the Year

Due: Oct. 15, 2020

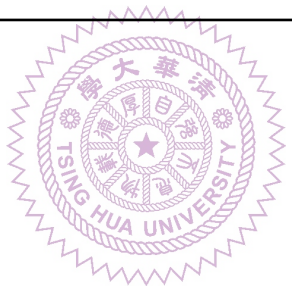
It is known that January 1st of this year is a Wednesday. With this information one can calculate the following information for any date of this year:

1. Which day of the year is this day?
2. Which week of the year is this day in?
3. What day of the week is this day?

Note that a week starts on a Sunday and ends on a Saturday.

Your assignment is to write a C program to read a date (month/day) and then print out those three information. Example program outputs are as the following.

```
$ ./a.out
Input a date (m/d): 2/2
It is day 33 of the year,
in the week 6 of the year,
and it is Sunday.
$ ./a.out
Input a date (m/d): 10/12
It is day 286 of the year,
in the week 42 of the year,
and it is Monday.
```



Notes.

1. Create a directory `lab03` and use it as the working directory.
2. Name your program source file as `lab03.c`.
3. The first few lines of your program should be comments as the following.

```
// EE231002 Lab03 Day of the Year
// ID, Name
// Date:
```

4. After finishing editing your source file, you can execute the following command to compile the program,

   ```
   $ gcc lab03.c
   ```

   If no compilation errors, the executable file, **a.out**, should be generated, and you can execute it by typing

   ```
   $ ./a.out
   ```

5. Typical inputs and outputs of the program execution have been shown above. But you should try a few more test cases to make sure your program function correctly.

6. After you finish verifying your program, you can submit your source code by

   ```
   $ ~ee2310/bin/submit lab03 lab03.c
   ```

   If you see a "submitted successfully" message, then you are done. In case you want to check which file and at what time you submitted your labs, you can type in the following command:

   ```
   $ ~ee2310/bin/subrec lab03
   ```

   It will show the last few submission records.