HW11

※本作業只要上傳檔案 Q1.c, Q2.c

1. (50%) Program Q1.c

   Write a C program

   (a) Create a date structure `date` that has 3 members include `year`, `month` and `day`, and the types are all integers.

   (b) Declare a structure variable `holiday` of the structure `date` type, and set the initial value to `{2004, 4, 26}`.

   (c) Declare a structure variable `festival` of the structure `date` type, and set the `year` member of the variable `festival` to 2005, `month` member to 12, and `day` member to 25 by inputting values from the keyboard.

   (d) Print out the values of structure `holiday` and `festival` in mm/dd/yyyy format. For example, 06/18/2004.

   The screen dialog should appear as follows:

   ```
   Input year: 2005
   Input month: 12
   Input day: 25
   holiday=04/26/2004
   festival=12/25/2005
   ```

2. (50%) Program Q2.c

   Write a C program

   (a) Create a time structure `time` that has 3 members include `hour`, `minutes` and `second`, where the type of `hour` and `minutes` are both integers, and the type of `second` is double.

   (b) Declare a structure variable `start` of the structure `time` type, and set the initial value to `{12, 32, 25.49}`.

   (c) Declare a struct variable `end` of the structure `time` type, and set the initial value to `{15, 12, 17.53}`.

   (d) Print out the values of structure `start` and `end` in the format of hh:mm:ss.ss. For example, `05:19:20.43` represents 5 hours, 19 minutes, and 20.43 seconds.

   (e) Try to calculate the total elapsed time from `start` to `end`. Please use another structural variable `elapse` to store the elapsed time and print it out in the format of hh:mm:ss.ss.

   The screen dialog should appear as follows:

   ```
   start=12:32:25.49
   end=15:12:17.53
   elaspe=02:39:52.04
   ```