Assembly and Machine Language Homework 3

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Your task is to write an assembly program that reads 5 integers from the standard input and stores them in 32 bits as follows. The inputs represent date and time (Shamsi) and consist of **year**, **month**, **day**, **hour** (in 24-hour format), and **minute** respectively. Your program must store the binary form of all these numbers in just a single 32-bit register according to the following encoding format:

0	Year (11 bits)	Month (4 bits)	Day (5 bits)	Hour (5 bits)	Minutes (6 bits)

Sum = 32 bits

Notice that the most significant bit is always zero. Your program must print 4 lines of output:
1. The content of the register printed as an integer,
2. The content of the register printed in the **Binary** form,
3. Day of the year (how many days since the beginning of the year),
4. Week of the year.

Your assembly program must comply with the following set of rules:
- You can only use the commands you have learned so far in the class.
- You have to use the **read_int**, **print_int,** and **print_char** functions from the textbook for **I/O**.
- Your assembly code must not be similar to other students' code. Similar codes will receive a **negative score**.
- The order of the inputs and outputs in your program must be exactly the same as what instructed here (look at the example below).
- Please only upload the "**.asm**" file on the **courses.kntu.ac.ir** website.

Sample Input :
   1397
   8
   5
   17
   23

output :
   1465396311
   01010111010110000010110001010111
   221
   31