CIS 21JA – Lab 5

Add code to your lab4.asm file to make the code more robust with error handling and printing time in standard format.

Lab requirement:

1. Copy lab4.asm to lab5.asm. If there was any point deduction or change suggestion in lab4.asm, fix the code so you don’t get point deduction again in Lab 5.  
   Note that you should still use the smallest data size, and only move up to the next data size when needed.
2. Add a loop for each user input to check that the hour is 0-23, the minute is 0-59, and the snooze time is 0-59. If any of the user input is not valid, print an error message and re-prompt until you get a valid input.  
   If one of the input values is not valid, only re-prompt for that one. Don’t make the user enter all 3 values again.
3. When subtracting to find the alarm time = ‘get out of bed’ time – snooze time  
   If the result is not valid, print an error message and don’t print an invalid alarm time. Note that you only need **one** instruction to check for valid result. (Hint: no cmp instruction needed.)
4. If the result is valid, print the alarm time in standard time format: hh:mm  
   2 digits for the hour, a colon, 2 digits for the minute.
5. After printing either the error message or the alarm time, loop back to the top of the program to prompt the user again. This will form an infinite loop for you to easily test your program. Use control-c to end the loop.

Sample output:

Enter hour of get up time: 7

Enter minute of get up time: 20

Enter number of minutes of snooze: 20

Alarm set for 07:00

Enter hour of get up time: 11

Enter minute of get up time: 15

Enter number of minutes of snooze: 20

Alarm set for 10:55

Enter hour of get up time: 1

Enter minute of get up time: 20

Enter number of minutes of snooze: 60

Must be 0-59

Enter number of minutes of snooze: 99

Must be 0-59

Enter number of minutes of snooze: 58

Alarm set for 00:22

Enter hour of get up time: 0

Enter minute of get up time: 0

Enter number of minutes of snooze: 30

Can't go to previous day

Enter hour of get up time: