CSULB
CECS174
Project 1

Objectives:

1. To practice editing and running the code
2. To start using programming for problem solving
3. To practice basic input and output
4. To practice simple arithmetic operations
5. To get introduced to pair programming
6. To write project report

Problem definition:
Many people keep time using a 24-hour clock (11 is 11AM and 23 is 11PM, 0 is midnight), that is called Military Time. Please check the following link for more information:

https://en.wikipedia.org/wiki/24-hour_clock

If it is currently 13:00, and you set your alarm to go off in 3 hours, it will be set to 16:00 (4:00 PM). But if it is currently 13:00 and you set the alarm to 40 hours, as 13+40 = 43. 43 hours means that it will go off after one full day and at 19h, that is 7 PM.

Write a Python program that will implement an alarm. It takes the **current hour** in Military time **as an input** (yes, we will take only an hour, not minutes or seconds). The program will **output when the alarm goes off**. We are interested in outputting the number of days and hours (hours in 24-hour clock time). For example, if it is currently 13:00 and you set your alarm to go off in 50 hours, the alarm will sound in 2 days at 15:00 hours (in two days at 3 pm).

Write a Python program to solve the **general version of the above problem**. Ask the user for the current time (in 24-Hour Clock -in hours), and then ask for the number of hours to wait for the alarm.

Your program should output what the time will be on the clock when the alarm goes off, that is, in how many days and what the time will be on the clock when the alarm goes off.
The print message should be as below. Please match the white spaces and text (the printout example corresponds to Example 1 below)

```
The alarm will sound in 1 day(s) at 2 hours
```

Steps:
0. You are doing pair programming. All teammates will share the responsibility of designing

the solution, implementing (coding, debugging, and testing), and writing the report. One partner will write or type while the other is observing and commenting. The partners need to

keep discussing how to solve each step of the problem. After about 2-3 minutes, the partners will switch roles. And keep switching until the project is done and the report is written.

1. Outline what are the inputs and output(s) of your code on paper (for the report).
2. Write down how will you compute the outputs using the inputs. Write a pseudo code: first a rough one, then including the details of the computation. Discuss with the class. Test your idea with a few examples.

General Requirements:

- Add comments to your code.
- Use mnemonic variable names.
- Check the project report requirement on Canvas.
- Copy, paste your code with a screenshot of your output (sample run) and include in your project report.
- Write the report (with your partner(s)) and submit it to an "assignment" for your team. An Assignment will be Canvas. Follow the project report template, as posted in Canvas.
- Submit the graded survey associated with the project individually.

Sample code run

Example 1:

```
Enter current hour: 23
Enter alarm hours: 3
The alarm will sound in 1 day(s) at 2 hours
```

Example 2:

```
Enter current hour: 3
Enter alarm hours: 12
The alarm will sound in 0 day(s) at 15 hours
```

Please note that it is **your responsibility** to make sure that you have uploaded the correct file.

You are going to work in a group, demonstrate as a group, upload your report as a group. However, you need to be prepared to be able to correctly answer any question asked by your instructor.
You are going to demonstrate this project during the first lab meeting after the due date.