

## Exercise #1

- **Problem 1. (*Separating Digits in an Integer*)** Write a program that inputs one five-digit number, separates the number into its individual digits and prints the digits separated from one another by three spaces each.

- [Hint: Use combinations of integer division and the remainder operation.]

- For example, if the user types in 42139, the program should print

4    2    1    3    9

- **Problem 2.** Write a program that asks the user to enter a number of seconds and then prints the same amount of time in days, hours, minutes, and seconds. [Hint: Use the remainder operator]輸入總秒數，換算成日時分秒輸出

- For example, 3667 seconds is equivalent to 0 days, 1 hour, 1 minute, and 7 seconds.

- Print out the result in the format:

"0 day(s), 1 hour(s), 1 minute(s), and 7 second(s)."

- **Problem 3.** Input three sides (a, b, c) of a triangle, calculate the area of the triangle

- $\text{area} = \sqrt{s(s-a)(s-b)(s-c)},$

- where  $s = (a + b + c) / 2$

- Import math module, use `math.sqrt(x)`

- You don't need to turn in your homework, but you should practice all problems because they may appear in the following exam.

- 作業自己練習就好，不用繳交，之後考試可能會出現類似題目