

# 第九周

## 本周目标

1. 熟悉 List、Tuple、Dict、String 等数据结构
2. 熟悉条件语句、循环语句

1. Write a program which will find all such numbers which are divisible by 7 but are not a multiple of 5, between 2000 and 3200 (both included). The numbers obtained should be printed in a comma-separated sequence on a single line.

Hints:

`tuple()` method can convert list to tuple

2. With a given integral number n, write a program to generate a dictionary that contains (i, i\*i) such that i is an integral number between 1 and n (both included). and then the program should print the dictionary.

Suppose the following input is supplied to the program:

8

Then, the output should be:

{1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64}

3. Write a program which accepts a sequence of comma-separated numbers from console and generate a list and a tuple which contains every number.

Suppose the following input is supplied to the program:

34, 67, 55, 33, 12, 98

Then, the output should be:

['34', '67', '55', '33', '12', '98']

('34', '67', '55', '33', '12', '98')

4. Write a program that accepts sequence of lines as input and prints the lines after making all characters in the sentence capitalized.

Suppose the following input is supplied to the program:

Hello world

Practice makes perfect

Then, the output should be:

HELLO WORLD

PRACTICE MAKES PERFECT

5. Write a program, which will find all such numbers between 1000 and 3000 (both included) such that each digit of the number is an even number.

The numbers obtained should be printed in a comma-separated sequence on a single line.