IT097IU - Introduction to Artificial Intelligence
Lab 0 - Python

Problem 1: Write a program to find all numbers that are divisible by 7 but not multiples of 5, within the range 2000 and 3200 (including 2000 and 3200). The result should be printed as a string on one line, separated by commas.

Problem 2: Given a given integer n, write a program to create a dictionary containing (i, i*i) as integers from 1 to n (including 1 and n) and then print this dictionary. Example: Assuming number n is 8, the output will be: {1:1, 2:4, 3:9, 4:16, 5:25, 6:36, 7:49, 8:64}.

Problem 3: Define a class with at least 2 methods:
- getString: to get a user inputted string from the console.
- printString: print the string entered to upper case.

Write a simple function/program to test your class.
Example: The input string is "hcmiu.edu.vn", the output must be "HCMIU.EDU.VN"

Problem 4: Write a program that accepts a string of words entered by the user, separated by commas. Then print the words in alphabetical order, separated by commas.
Assuming input is: *without,hello,bag,world*, the output will be: *bag,hello,without,world.*

Problem 5: Define a class named Shape and the following subclasses: Square, Circle. Square and Circle have an init function that takes a length argument. Both classes have an area function to print the area of the shape (the default area of Shape is 0).