Fitchburg State University
CSC 7014 Practice Computer Programming
Instructor: Nguyen Thai
Due: 10/7/2017 at 11:00 PM
Student:

CSC 7014 Assignment 3: Chinese Zodiac

The purpose of this assignment is to learn how to program the if-elif-else statements. Your program is to be written in the Python language. You will be graded for output correctness, code comments, code indentation, descriptive variables and source code file header completeness.

As you work through the assignment be sure to answer all questions (type your answers into this document) and take all screenshots as requested (copy them into the document). For the screenshots, you can use the Snipping Tool that is built-in to Windows to capture the important parts of the lab as highlighted in the document below. Do not delete the contents of this file. When finished, you will submit the document source code file and associated data files to the instructor via Blackboard. DO NOT SUBMIT ZIP FILES OR INDIVIDUAL IMAGES. If you have any questions or need any clarification, email the instructor *before* the deadline.

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1. In this lab you are to write a program in Python called *chineseZodiac.py* to calculate the Chinese Zodiac for a given user input as a year number.

2. The Chinese Zodiac is based on a 12-year cycle, and each year in the cycle is represented by an animal in following order:

   0. Monkey
   1. Rooster
   2. Dog
   3. Pig
   4. Rat
   5. Ox
   6. Tiger
   7. Rabbit
   8. Dragon
   9. Snake
   10. Horse

11. Sheep

12. The value of (year % 12) determines the zodiac sign. For example, 1900 is the year of the rat, since (1900 % 12) is 4.

3. Prompt the user to enter a year number as an integer. You need to check for valid input. For example, negative number is invalid.
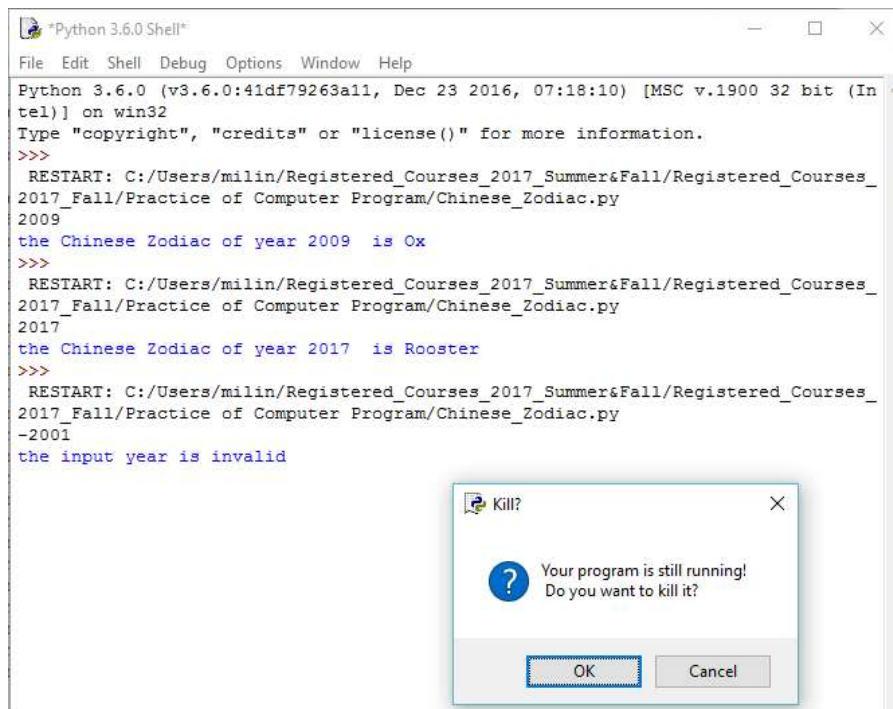
4. Write the user's input and your calculated output as:

   Year 1900 is the rat!

5. Before coding, think how you are going to tackle this problem, and write a brief description of the logic of your program.

6. **INSERT YOUR DESCRIPTION HERE.**
   Ans:
   1) get the number of year using *input*() function and convert the input number into integer (since the type of variable we got by *input* function is string)
   2) test if the input number of year is valid or not (for example, a negative number is invalid), if not, then exit the program
   3) modular the number of year with 12, then assign the variable Chinese_Zodiac different character according the result of modular, using *if_elif_else* statement
   4) print out the Chinese Zodiac of input year

7. **TAKE A SCREENSHOT** of your input and output, and paste them here. Do not paste your source code in this document.

8. Submit your source code (chineseZodiac.py) and this document to Blackboard for grading.