CPSC 217 Exercise 4: The Exercise Due on the 3rd Day of the 6th Month

Due: Monday June 3, 2024 at 11:55pm

This exercise may be completed individually or as part of a group. If the exercise is completed as a group then all members of the group are expected to make a meaningful contribution to the solution.

Task:

In English, ordinal numbers like first, second, and third are sometimes written as a numeral followed by two letters such as 1st, 2nd and 3rd. While this is easy enough for a person to do, it actually causes a little bit of trouble in a computer program because of the different suffixes used for different numbers. The suffix can be determined using the following rules:

- Any number that ends in 11, 12 or 13 uses a th suffix
- All remaining numbers that end in 1 use an st suffix
- All remaining numbers that end in 2 use an nd suffix
- All remaining numbers that end in 3 use an rd suffix
- All remaining numbers use a th suffix

Write a function named int2ordinal that takes an integer as its only parameter and returns the number with its appropriate suffix as its result (stored in a string). For example, if your function is passed the integer 1 then it should return the string "1st". If it is passed the integer 12 then it should return the string "12th". If it is passed 2003 then it should return the string "2003rd". Your function must not print anything on the screen.

You can use the remainder operator to extract the last digit of an integer by computing the remainder when the integer is divided by 10. Similarly, you can extract the last two digits of an integer by computing the remainder when the integer is divided by 100. For example 29 % 10 is 9 while 1911 % 100 is 11. Then you can construct the string that needs to be returned by your function by converting the integer parameter into a string by calling the str function, and concatenating the appropriate suffix using the + operator.

I have provided a program on the course website that uses calls the int2ordinal function to output a simple message. Add your int2ordinal function to this file so that it executes successfully. **Do not** change any of the code that I have provided, other than to insert your implementation for the int2ordinal function.

Your program does not need to do any error checking. You can assume that the inputs will always be integers within the ranges specified in the prompts.

Sample Run #1:

Enter a day between 1 and 31: 11 Enter a month between 1 and 12: 4 Enter a year between 1 and 2100: 2012 On the 11th day of the 4th month of the 2012th year, something amazing happened!

Sample Run #2:

Enter a day between 1 and 31: 1 Enter a month between 1 and 12: 2 Enter a year between 1 and 2100: 3 On the 1st day of the 2nd month of the 3rd year, something amazing happened!

Grading:

Your program will be graded by testing it with two different sets of input, which may be different from the examples shown above. Your program must use a function to convert from an integer to its ordinal number. A program that does not use a function that takes one integer parameter and returns a string will receive a grade of F even if all of the output is correct. Your function must **not** print out the result, and you must **not** modify the provided code other than to insert your function at the point indicated.

Submission Instructions:

Submit your solution as a Python source code file electronically to the Exercise 4 drop box in D2L. You do **not** need to submit a paper copy of your solution. If you choose to complete this exercise as part of group then each member of the group must submit a copy of the exercise using D2L.