CPSC 217 Exercise 4: The Exercise Due on the 17th Day of the 3rd Month

Due: Friday March 17, 2017

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 that takes an integer as its only parameter and returns the appropriate suffix for the ordinal abbreviation of that integer as its only result. For example, if your function is passed the integer 1 then it should return the string "st". If it is passed the integer 12 then it should return the string "th". If it is passed 2003 then it should return the string "rd". **Your function must not print anything on the screen.**

Write a main program that reads three integers from the user that represent a day, a month, and a year. Display the message "On the A day of the B month of the C year, something amazing happened!" with A, B and C replaced with the ordinal abbreviation for the day, month and year entered by the user (including both the numeric part and the appropriate suffix). For example, if the user enters 29, 2 and 1904 (each on its own line) then your program should display "On the 29th day of the 2nd month of the 1904th year, something amazing happened!"

Your program does not need to do any error checking. You can assume that the inputs will always be integers greater than 0.

Hints:

- 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, or the last two digits of an integer by computing the remainder when the integer is divided by 100.
- You can convert an integer into a string by calling the `str` function. Then you can concatenate the result of that function call to another string. This will let you eliminate undesirable spaces in your output.

Sample Run #1:

```
Enter a day: 17
Enter a month: 3
Enter a year: 2017
On the 17th day of the 3rd month of the 2017th year, something amazing
happened!
```

Sample Run #2:

```
Enter a day: 1
Enter a month: 2
Enter a year: 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 return a string result will receive a grade of F even if all of the output is correct. Your function must **not** print out the result. The spacing in your program should match the samples shown above. In particular, the two character suffix should appear right next to the integer value without any spaces in between them.

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.