Programming using Python

Assignment 1

Week 1 (13/10/2018 - 21/10/2018)

F) Find the difference between python 2 and 3?

Differences	Python 2	Python 3
1	In Python 2, strings are stored as ASCII by default–you have to add a "u" if you want to store strings as Unicode in Python 2.x.	In Python 3, text strings are Unicode by default. Unicode strings can store foreign language letters, Roman letters and numerals, symbols, emojis, etc., offering you more choices.
2	In Python 2, if you write a number without any digits after the decimal point, it rounds your calculation down to the nearest whole number.	In Python 3, if you write a number without any digits after the decimal point, the change in integer-division behavior can be noticed The expression 5 / 2 will return the expected result of 2.5 without having to worry about adding those extra zeroes.
3	In Python 2, the print statement looks like a print " " s function In Python 2 it is print "hello" but in Python 3 it is print ("hello").	In Python 3, the print statement has been replaced with a print () function
4	In order to avoid the dangerous behavior in Python 2 to read in other types than strings, we have to use raw_input() instead.	The input() function was fixed in Python 3 so that it always stores the user inputs as string objects.
5	In Python 2.x there is range and xrange method, where xrange is a generator, and range give a list of items.	In Python 3, the range() was implemented like the xrange() function so that a dedicated xrange()function does not exist anymore (xrange() raises a NameError in Python 3
6		Python 3 adopted the now standard way of rounding decimals when it results in a tie (.5) at the last significant digits. Now, in Python 3, decimals are rounded to the nearest even number.