Wk 10	Focus & Medium Oct 31 to Nov 5	Weekly Topic & Assignment

```
""" it.304 week 10 EXAM - 7 pillars of python, Created on Sat Oct 22 07:42:57 2022, Updated 10/31/22
#=> Good writing is good thinking, and good programming is mad-hatting
#=> due date =  when you complete the exercises
link to materials => https://github.com/bbe2/IT.304.Fall.2022/blob/main/code_wk_10_project_code_workbook.py
"""Over the past few weeks have you have taken the time to learn Python data structures, data pack/unpack,
data transformation, conditionals, iterators, functions, and building your own object-oriented classes. Whew!

This is a significant undertakening and all autobots.it304 have performed amazingly well. You have shown your
capacity to think different and "sticktoitness." You are doing the work others find challenging.

Now let's take Shakespeare from the bottom up. In this challenge you will work directly with text files and
duplicate the spreadsheet tables from weeks 5-8. You will import, transform, iterate, use conditionasl, and
end with a simple object asking user what they want to read and giving it to them. Use your skills and make it
so. ~brianh

p.s. Please provide quality and thoughtful answers to all questions. I encourage you to write as much as you
want, ask me questions back, and use this as your opportunity to build a piece of evidence you can put in your
portfolio and showcase to an employer. I am happy to help you expand items if you would like to do.

#=> EXAM Part 0 - fill in the blanks
     obj_Name   | charcter code      |   explicit code
      --------- | ------------------ | ----------------------------
  i) mytuple =  |  (, )              |=> mytuple = tuple(myobject)
 ii) mylist =   |                    |=> mylist  =
iii) mydict =   |                    |=> mydict  =
 iv) myset  =   |                    |=> myset   =
  v) dataframe =|                    |=> df      =
 vi) mystring = |                    |=> mystring=

# data files here in either a zip or individual files. if you download git
#https://github.com/bbe2/IT.304.Fall.2022/tree/Shakespeare-Corpus
#https://github.com/bbe2/IT.304.Fall.2022/blob/Shakespeare-Corpus/shakespeare_txt_fullname.zip
#-------------------------------------------------------------------------------
#=> EXAM Part I    - replicate shakespeare spreadsheet from wks 5-8
#-------------------------------------------------------------------------------
  #    Situation: unfortunately your business customer cant read the data b/c
  #    they dont know how to open text files in WORD. PLEASE help them out!
  #      1a) get the names of the play
  #      1b) create a list of play script data
  #      1c) count total words in script and titles
  #      1d) create numeric indexID for each: hint -> list(range(999))
  #      1f) DARN-it! there is not play type information. What should u do?
  #      1e) create a dictionary that matchs weeks 5-8 input spreadsheet
  #          => title, script, type, id
  #      1g) send dict to df, df to spreadsheet, email to me
#-------------------------------------------------------------------------------
#=> EXAM Part II   - create summary report by play type
#-------------------------------------------------------------------------------
  #       Total all script words and title words by 3 play types
  #       send to df to spreadsheet and email to me
#-------------------------------------------------------------------------------
#=> EXAM Part III  - ask user what play they want to read and email the data
#-------------------------------------------------------------------------------
#       3a) Create an object with one or two functions.
#           Ask user what play they want to read.
#           Figure out a minimum of 1 other useful piece of information
#           to display or include in user report.
#           Have function export data and send me data file.
```