EXPLORER

{} User Settings | percipio43_writing_binary_data.py ●

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```
'''
percipio43_writing_binary_data.py
Percipio video: Working with Files; Writing Binary Data

Demonstrate how to write binary data to a file in Python.

In order to write binary data to a file, use 1 of 2 ways, either use bytes, or data thats
    been packed:
* use the struck module pack
* use the native bytes object to encode data (i.e.: text) into binary data, or bytes.

'ascii_letters' data is a string of ASCII letters A through Z, lowercase and uppercase.
    This will be the data written to the file.
'''
from string import ascii_letters # from the string module, ascii_letters data is imported
data = bytes(ascii_letters, 'utf-8') # the data is encoded with 'utf-8'
print('Bytes data-1:', data)

with open('letters.bin', mode='wb') as out_file: # open the file using the write mode & add
    'b' for binary
    out_file.write(data) # writes the data encoded as bytes

''' to prove the write worked properly, read the data from the 'letter.bin' file '''
with open('letters.bin', mode='rb') as in_file: #
    data = in_file.read() #

print('Bytes data-2:', data) # binary or Bytes data is printed
print('String data:', data.decode('utf-8')) # see decoding the string in the encoding
    format that was used
'''
RESULTS:
FROM THE TERMINAL:
Bytes data-1: b'abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ'
Bytes data-2: b'abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ'
String data: abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ

FROM THE 'letters.bin' FILE (open in VSC)
abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ
'''
#  NOTE: the Bytes data has a 'b' prefixed to a quoted string, whereas the string data has
    no quotes because it's been converted to a string
```