```python
'''The module docstring appears at the top of the file

A triple-quoted string appearing at the beginning of a Python file is known as that modules docstring.
When importing a module and using 'help', it is this docstring that will appear.

If a longer description of more than one line is needed, a blank line should be skipped after the first line
and then a longer description can be provided.

Blank lines should also be used to seperate multiple paragraphs as necessary.

Docstrings have double-underscore-doc-double-underscore (__doc__) attributes which identify them.

PEP 257 defines the technical details of docstrings.
[Python Enhancement Proposals](https://www.python.org/dev/peps/)'''

# percipio36_docstrings.py
# Percipio video: Working with Files
nl = '\n'

class DocumentMe():
    '''docstrings for classes follows the same rules.'''

    def __init__(self):
        '''docstrings for methods can be used'''
        # Interesting side-use of docstrings:
        self.text = '''Triple-quoted strings can be
        used to hold WYSIWYG
        formated string.'''
        # In this case when an instance of 'DocumentMe' class is created, the 'self.text' attribute of this
        # instance will hold this triple-quoted string.
def funk():
    '''docstrings for normal functions'''
    pass # 'pass' is a no-action placeholder for a function

'''Docstrings can be used as long comments as well.'''
print('The module docstring writted as \'__doc__\':', __doc__) # without any qualification while in the main
namespace, __doc__ refers to the module
print('The class docstring writted as \'DocumentMe.__doc__\':', DocumentMe.__doc__) # to access, use the
classname-dot then __doc__
print('A method docstring writted as \'DocumentMe.__init__.__doc__\':', DocumentMe.__init__.__doc__) # to
access further into the class using the special init method
print('A function docstring writted as \'funk.__doc__\':', funk.__doc__) # to access, use the function-dot
then __doc__
# Do not need to print these help statements (only for display purpose)
```

```python
print('Docstrings are automatically used by Python\'s help function:')
print(nl, 'MODULE HELP:')
print('help(__name__) = ', help(__name__)) # help(__name__) help within the current namespace & module
print(nl, 'CLASS HELP:')
print('help(DocumentMe) = ', help(DocumentMe)) # help(class-name) help for a class
print(nl, 'FUNCTION HELP:')
print('help(funk) = ', help(funk)) # help(function-name) = help for a function
'''

RESULTS:
NEED TO PLAY WITH THESE RESULTS.  THEY'RE A LITTLE FUNKY.

The module docstring writted as '__doc__': The module docstring appears at the top of the file

A triple-quoted string appearing at the beginning of a Python file is known as that modules docstring.
When importing a module and using 'help', it is this docstring that will appear.

If a longer description of more than one line is needed, a blank line should be skipped after the first line
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Docstrings have double-underscore-doc-double-underscore (__doc__) attributes which identify them.

PEP 257 defines the technical details of docstrings.
[Python Enhancement Proposals](https://www.python.org/dev/peps/)
The class docstring writted as 'DocumentMe.__doc__': docstrings for classes follows the same rules.
A method docstring writted as 'DocumentMe.__init__.__doc__': docstrings for methods can be used
A function docstring writted as 'funk.__doc__': docstrings for normal functions
Docstrings are automatically used by Python's help function:

 MODULE HELP:
Help on module __main__:

NAME
    __main__ - The module docstring appears at the top of the file

DESCRIPTION
    A triple-quoted string appearing at the beginning of a Python file is known as that modules docstring.
    When importing a module and using 'help', it is this docstring that will appear.

    If a longer description of more than one line is needed, a blank line should be skipped after the first
    line and then a longer description can be provided.

    Blank lines should also be used to seperate multiple paragraphs as necessary.
```

```
 80
 81        Blank lines should also be used to seperate multiple paragraphs as necessary.
 82
 83        Docstrings have double-underscore-doc-double-underscore (__doc__) attributes which identify them.
 84
 85        PEP 257 defines the technical details of docstrings.
 86        [Python Enhancement Proposals](https://www.python.org/dev/peps/)
 87
 88    CLASSES
 89        builtins.object
 90            DocumentMe
 91
 92        class DocumentMe(builtins.object)
 93         |  docstrings for classes follows the same rules.
 94         |
 95         |  Methods defined here:
 96         |
 97         |  __init__(self)
 98         |      docstrings for methods can be used
 99         |
100         |  ----------------------------------------------------------------------
101         |  Data descriptors defined here:
102         |
103         |  __dict__
104         |      dictionary for instance variables (if defined)
105         |
106         |  __weakref__
107         |      list of weak references to the object (if defined)
108
109    FUNCTIONS
110        funk()
111            docstrings for normal functions
112
113    DATA
114        __annotations__ = {}
115        nl = '\n'
116
117    FILE
```

```
116
117    FILE
118        c:\python36x64\test.py
119
120
121    help(__name__) =  None
122
123     CLASS HELP:
124    Help on class DocumentMe in module __main__:
125
126    class DocumentMe(builtins.object)
127     |   docstrings for classes follows the same rules.
128     |
129     |   Methods defined here:
130     |
131     |   __init__(self)
132     |       docstrings for methods can be used
133     |
134     |   ----------------------------------------------------------------------
135     |   Data descriptors defined here:
136     |
137     |   __dict__
138     |       dictionary for instance variables (if defined)
139     |
140     |   __weakref__
141     |       list of weak references to the object (if defined)
142
143    help(DocumentMe) =  None
144
145     FUNCTION HELP:
146    Help on function funk in module __main__:
147
148    funk()
149        docstrings for normal functions
150
151    help(funk) =  None
152    '''
```