```python
'''
percipio39_reading_text_files.py
Percipio video: Working with Files; Reading Text Files
Demonstrate reading text from a file using the open() function
This is based on PEP 20 -- The Zen of Python
Encoding is important and has a few choices
* leave blank and let the computer automatically decide
* us is MS Windows encoding
* latin-1 is English text
* utf-8
* utf-16
'''

nl = '\n'
print(nl, 'Iterating over lines:')
''' Reading text from a file with default encoding '''
with open('reading_text_files.txt') as text_file: # uses the open() function to open a path
    to a file, it creates a 'file-like' object that can be automatically looped over.  This
    returns each line in the file.
    for line in text_file:
        print(line, end='')


print(nl, 'Using the read() method:')
''' Reading text from a file with (Windows) "us" encoding '''
with open('reading_text_files.txt', encoding='us') as text_file:
    text = text_file.read() # use the file-like object to read the entire file
print(text)
''' There is the ability to specify the number of bytes to read, but this is not typically
    done with text files. '''

print(nl, 'Using readlines() method which creates a list of all lines in a file & allows
    working with individual lines:') # Note: readlines
''' Reading text from a file with "utf-8" encoding '''
with open('reading_text_files.txt', encoding='utf-8') as text_file:
    lines = text_file.readlines() # automatically populates a list of all the lines from the
        file
print(lines)

print(nl, 'Using readline() method which works with one line at a time:') # Note: readline
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```python
33  print(nl, 'Using readline() method which works with one line at a time:') # Note: readline
34  ''' Reading text from a file with "latin-1" encoding '''
35  with open('reading_text_files.txt', encoding='latin-1') as text_file:
36      while 1: # endless while loop which attempts to read a line from the file
37          line = text_file.readline() # returns only one line
38          if not line: # if the while loop is not able to read a line,
39              break # then it breaks out of the loop,
40          else: # otherwise,
41              print(line, end='') # the loop prints the line it can read.
42
43  print(nl, 'Using error Handling:')
44  ''' Errors happen from inability to find the file and/or specifying the incorrect encoding '''
45  try: # try block allows the program to continue if the file has an error
46      ''' Reading text from a file with "utf-16" encoding '''
47      with open('reading_text_files.txt', encoding='utf-16') as text_file:
48          for line in text_file:
49              print(line, end='')
50  except UnicodeError: # with a failed file, an error can be messaged
51      print('Error with Unicode encoding')
52  '''
53  RESULT:
54   Iterating over lines:
```

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52    '''
53    RESULT:
54     Iterating over lines:
55    reading_text_files.txt_Line 001
56    reading_text_files.txt_Line 002
57    reading_text_files.txt_Line 003
58    reading_text_files.txt_Line 004
59    reading_text_files.txt_Line 005
60
61     Using the read() method:
62    reading_text_files.txt_Line 001
63    reading_text_files.txt_Line 002
64    reading_text_files.txt_Line 003
65    reading_text_files.txt_Line 004
66    reading_text_files.txt_Line 005
67
68     Using readlines() method which creates a list of all lines in a file & allows working with
          individual lines:
69    ['reading_text_files.txt_Line 001\n', 'reading_text_files.txt_Line 002\n',
          'reading_text_files.txt_Line 003\n', 'reading_text_files.txt_Line 004\n',
          'reading_text_files.txt_Line 005\n']
70
71     Using readline() method which works with one line at a time:
72    reading_text_files.txt_Line 001
73    reading_text_files.txt_Line 002
74    reading_text_files.txt_Line 003
75    reading_text_files.txt_Line 004
76    reading_text_files.txt_Line 005
77
78     Using error Handling:
79    Error with Unicode encoding
80     '''
```