

In [3]:

```
# How do you open a file for reading in Python?  
def read_csv():  
    with open(r"C:\Users\Ramakrishna\Desktop\functionup\Python Assignment\Demon.txt",mode  
        for line in file:  
            print(line)  
read_csv()
```

line1

line2

line3

line4

line5

line6

line7

In [6]:

*# How do you open a file for writing in Python?***def** write_file():

```

    with open("welcome.txt",mode="w",encoding="utf-8") as f:
        paragraph="""The following illustrates how to write a string to a text file:

```

```

with open('readme.txt', 'w') as f:
    f.write('readme')

```

Code language: JavaScript (javascript)

Steps for writing to text files

To write to a text file in Python, you follow these steps:

First, open the text file for writing (or append) using the open() function.

Second, write to the text file using the write() or writelines() method.

Third, close the file using the close() method.

The following shows the basic syntax of the open() function:

f = open(file, mode)

The open() function accepts many parameters. But you'll focus on the first two:

The file parameter specifies the path to the text file that you want to open for writing.

The mode parameter specifies the mode for which you want to open the text file.

For writing to a text file, you use one of the following modes:

Mode	Description
'w'	Open a text file for writing. If the file exists, the function will truncate all the
'a'	Open a text file for appending text. If the file exists, the function append contents
‘+’	Open a text file for updating (both reading & writing).

The open() function returns a file object that has two useful methods for writing text to

The write() method writes a string to a text file.

The writelines() method write a list of strings to a file at once.

The writelines() method accepts an iterable object, not just a list, so you can pass a tu

To write a line to a text file, you need to manually add a new line character:

f.write('\n')

f.writelines('\n')

Code language: JavaScript (javascript)

Writing text file examples

The following example shows how to use the write() function to write a list of texts to a

lines = ['Readme', 'How to write text files in Python']

with open('readme.txt', 'w') as f:

for line in lines:

f.write(line)

f.write('\n')

Code language: JavaScript (javascript)

If the readme.txt file doesn't exist, the open() function will create a new file.

The following shows how to write a list of text strings to a text file:

lines = ['Readme', 'How to write text files in Python']

with open('readme.txt', 'w') as f:

f.writelines(lines)

Code language: JavaScript (javascript)

If you treat each element of the list as a line, you need to concatenate it with the newl

lines = ['Readme', 'How to write text files in Python']

```
with open('readme.txt', 'w') as f:
    f.write('\n'.join(lines))
Code language: JavaScript (javascript)
```

Appending text files

To append to a text file, you need to open the text file for appending mode. The following

```
more_lines = ['', 'Append text files', 'The End']
```

```
with open('readme.txt', 'a') as f:
    f.write('\n'.join(more_lines))
Code language: JavaScript (javascript)
Output:
```

Writing to a UTF-8 text file

If you write UTF-8 characters to a text file using the code from the previous examples, y

```
UnicodeEncodeError: 'charmap' codec can't encode characters in position 0-44: character m
Code language: HTML, XML (xml)
```

To open a file and write UTF-8 characters to a file, you need to pass the encoding='utf-8'

The following example shows how to write UTF-8 characters to a text file:

```
quote = '成功を収める人とは人が投げてきたレンガでしっかりした基盤を築くことができる人のことである'
```

```
with open('quotes.txt', 'w', encoding='utf-8') as f:
    f.write(quote)
```

Code language: JavaScript (javascript)

Summary

Use the open() function with the w or a mode to open a text file for appending.

Always close the file after completing writing using the close() method or use the with s

Use write() and writelines() methods to write to a text file.

Pass the encoding='utf-8' to the open() function to write UTF-8 characters into a file."

```
        f.write(paragraph)
write_file()
```

In [11]:

```
# How do you read the contents of a file in Python?  
def read_content():  
    with open("welcome.txt",mode='r',encoding="utf-8") as f:  
        content=f.read()  
        print(content)  
read_content()
```

The following illustrates how to write a string to a text file:

```
with open('readme.txt', 'w') as f:
    f.write('readme')
```

Code language: JavaScript (javascript)

Steps for writing to text files

To write to a text file in Python, you follow these steps:

First, open the text file for writing (or append) using the `open()` function.

Second, write to the text file using the `write()` or `writelines()` method.

Third, close the file using the `close()` method.

The following shows the basic syntax of the `open()` function:

```
f = open(file, mode)
```

The `open()` function accepts many parameters. But you'll focus on the first two:

The file parameter specifies the path to the text file that you want to open for writing.

The mode parameter specifies the mode for which you want to open the text file.

For writing to a text file, you use one of the following modes:

Mode	Description
'w'	Open a text file for writing. If the file exists, the function will truncate all the contents as soon as you open it. If the file doesn't exist, the function creates a new file.
'a'	Open a text file for appending text. If the file exists, the function append contents at the end of the file.
'+'	Open a text file for updating (both reading & writing).

The `open()` function returns a file object that has two useful methods for writing text to the file: `write()` and `writelines()`.

The `write()` method writes a string to a text file.

The `writelines()` method write a list of strings to a file at once.

The `writelines()` method accepts an iterable object, not just a list, so you can pass a tuple of strings, a set of strings, etc., to the `writelines()` method.

To write a line to a text file, you need to manually add a new line character:

```
f.write('
')
f.writelines('
')
```

Code language: JavaScript (javascript)

Writing text file examples

The following example shows how to use the `write()` function to write a list of texts to a text file:

```
lines = ['Readme', 'How to write text files in Python']
```

```
with open('readme.txt', 'w') as f:
```

```
    for line in lines:
```

```
        f.write(line)
```

```
        f.write('
')
```

Code language: JavaScript (javascript)

If the `readme.txt` file doesn't exist, the `open()` function will create a new file.

The following shows how to write a list of text strings to a text file:

```
lines = ['Readme', 'How to write text files in Python']
with open('readme.txt', 'w') as f:
    f.writelines(lines)
```

Code language: JavaScript (javascript)

If you treat each element of the list as a line, you need to concatenate it with the newline character like this:

```
lines = ['Readme', 'How to write text files in Python']
with open('readme.txt', 'w') as f:
    f.write('
'.join(lines))
```

Code language: JavaScript (javascript)

Appending text files

To append to a text file, you need to open the text file for appending mode. The following example appends new lines to the readme.txt file:

```
more_lines = ['', 'Append text files', 'The End']
```

```
with open('readme.txt', 'a') as f:
    f.write('
'.join(more_lines))
```

Code language: JavaScript (javascript)

Output:

Writing to a UTF-8 text file

If you write UTF-8 characters to a text file using the code from the previous examples, you'll get an error like this:

```
UnicodeEncodeError: 'charmap' codec can't encode characters in position 0-44: character maps to <undefined>
```

Code language: HTML, XML (xml)

To open a file and write UTF-8 characters to a file, you need to pass the `encoding='utf-8'` parameter to the `open()` function.

The following example shows how to write UTF-8 characters to a text file:

```
quote = '成功を収める人とは人が投げてきたレンガでしっかりした基盤を築くことができる人のことである。'
```

```
with open('quotes.txt', 'w', encoding='utf-8') as f:
    f.write(quote)
```

Code language: JavaScript (javascript)

Summary

Use the `open()` function with the `w` or `a` mode to open a text file for appending.

Always close the file after completing writing using the `close()` method or use the `with` statement when opening the file.

Use `write()` and `writelines()` methods to write to a text file.

Pass the `encoding='utf-8'` to the `open()` function to write UTF-8 characters into a file.

In [16]:

```
# How do you write to a file in Python?
f=open("welcome.txt",mode="a")
f.write("now python is most powerful")
f.close()
```

In [20]:

```
# How do you close a file in Python?
f=open("Demon.txt",mode='r')
f.read()
f.close()
```

In [21]:

```
# How do you handle errors while reading or writing a file in Python?
filename = 'John.txt'
try:
    with open(filename) as f_obj:
        contents = f_obj.read()
except FileNotFoundError:
    msg = "Sorry, the file " + filename + "does not exist."
    print(msg)
```

Sorry, the file John.txtdoes not exist.

In [23]:

```
f=open("Demon.txt",mode='r')
for li in f.read():
    print(li,end=" ")
```

l i n e 1
l i n e 2
l i n e 3
l i n e 4
l i n e 5
l i n e 6
l i n e 7

In [28]:

```
# How do you use the "with" statement for file handling in Python?
def openfile():
    with open("Demon.txt",mode='r') as file:
        for line in file:
            print(line)
openfile()
```

line1

line2

line3

line4

line5

line6

line7\line8

In [27]:

```
def append():
    f=open("Demon.txt",mode='a')
    f.write("\line8")
    f.close()
append()
```

In [34]:

```
# How do you use the "os" module for file handling in Python, for example, to check if a
import os
def check_file():
    check_file=os.path.isfile("king.txt")
    print(check_file)
check_file()
```

False

In []:

In []: