

Python Append To File

Writing to an opened file with the `'w'` flag overwrites all previous content in the file. To avoid this, we can append to a file instead. Use the `'a'` flag as the second argument to `open()`. If a file doesn't exist, it will be created for append mode.

```
with open('shopping.txt', 'a') as shop:  
    shop.write('Tomatoes, cucumbers, celery\n')
```

Class csv.DictWriter

```
# An example of csv.DictWriter
import csv

with open('companies.csv', 'w') as csvfile:
    fieldnames = ['name', 'type']
    writer = csv.DictWriter(csvfile, fieldnames=fieldnames)
    writer.writeheader()
    writer.writerow({'name': 'Codecademy', 'type': 'Learning'})
    writer.writerow({'name': 'Google', 'type': 'Search'})

"""
After running the above code, companies.csv will contain the following:

name,type
Codecademy,Learning
Google,Search
"""
```

In Python, the `csv` module implements classes to read and write tabular data in CSV format. It has a class `DictWriter` which operates like a regular writer but maps a dictionary onto output rows. The keys of the dictionary are column names while values are actual data.

The `csv.DictWriter` constructor takes two arguments. The first is the open file handler that the CSV is being written to. The second named parameter, `fieldnames`, is a list of field names that the CSV is going to handle.

Python Write To File

By default, a file when opened with `open()` is only for reading. A second argument `'r'` is passed to it by default. To write to a file, first open the file with write permission via the `'w'` argument. Then use the `.write()` method to write to the file. If the file already exists, all prior content will be overwritten.

```
with open('diary.txt','w') as diary:  
    diary.write('Special events for today')
```

Parsing JSON files to dictionary

```
# Use json.load with an opened file object to read the contents :  
  
# Contents of file.json  
# { 'userId': 10 }  
  
import json  
with open('file.json') as json_file:  
    python_dict = json.load(json_file)  
  
print(python_dict.get('userId'))  
# Prints 10
```

JSON format is used to store key value pairs. Python's `json` module allows reading such data format and parsing it to a dictionary. The `json.load` function takes a file object as an argument and returns the data in a dictionary format.

Python Readlines Method

Instead of reading the entire content of a file, you can read a single line at a time. Instead of `.read()` which returns a string, call `.readlines()` to return a list of strings, each representing an individual line in the file. Calling this code:

```
with open('lines.txt') as file_object:  
    file_data = file_object.readlines()  
    print(file_data)
```

returns a list of strings in `file_data`:

```
['1. Learn Python.\n', '2. Work hard.\n', '3. Graduate.']
```

Iterating over the list, `file_data`, and printing it:

```
for line in file_data:  
    print(line)
```

outputs:

```
1. Learn Python.  
  
2. Work hard.  
  
3. Graduate.
```

Python Readline Method

To read only one line instead of multiple lines in a Python file, use the method `.readline()` on a file object that is returned from the `open()` function. Every subsequent `.readline()` will extract the next line in the file if it exists.

```
with open('story.txt') as story_object:  
    print(story_object.readline())
```

will print only the first line in `story.txt`.

Python File Object

A Python file object is created when a file is opened with the `open()` function. You can associate this file object with a variable when you open a file using the `with` and `as` keywords. For example:

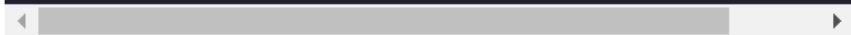
```
with open('somefile.txt') as file_object:
```

You can then print the content of the file object, `file_object` with `print()`.

```
print(file_object)
```

You might see something like this on the output terminal:

```
<_io.TextIOWrapper name='somefile.txt' mode='r' encoding='U
```

The image shows a terminal window with a scrollbar. The text "<_io.TextIOWrapper name='somefile.txt' mode='r' encoding='U" is visible, and the scrollbar indicates that the text continues on the next line.