

Reading a Text File:

```
In [ ]: with open('file.txt', 'r') as f:
        contents = f.read()
```

Writing to a Text File:

```
In [ ]: with open('file.txt', 'w') as f:
        f.write('Hello, World!')
```

Appending to a Text File:

```
In [ ]: with open('file.txt', 'a') as f:
        f.write('Hello, World!')
```

Reading a Text File Line by Line:

```
In [ ]: with open('file.txt', 'r') as f:
        lines = f.readlines()
        for line in lines:
            print(line)
```

Reading a CSV File using CSV Module:

```
In [ ]: import csv

        with open('file.csv', 'r') as f:
            reader = csv.reader(f)
            for row in reader:
                print(row)
```

Writing to a CSV File using CSV Module:

```
In [ ]: import csv

        data = [['Name', 'Age'], ['John', 25], ['Alice', 30]]

        with open('file.csv', 'w', newline='') as f:
            writer = csv.writer(f)
            writer.writerows(data)
```

Reading a JSON File:

```
In [ ]: import json

        with open('file.json', 'r') as f:
            data = json.load(f)
            print(data)
```

Writing to a JSON File:

```
In [ ]: import json

        data = {'name': 'John', 'age': 25}
```

```
with open('file.json', 'w') as f:
    json.dump(data, f)
```

Reading a Binary File:

```
In [ ]: with open('file.bin', 'rb') as f:
        data = f.read()
```

Writing to a Binary File:

```
In [ ]: data = b'Hello, World!'

        with open('file.bin', 'wb') as f:
            f.write(data)
```

Reading a Text File using Pandas:

```
In [ ]: import pandas as pd

        df = pd.read_csv('file.txt', delimiter='\t')
```

Writing to a Text File using Pandas:

```
In [ ]: import pandas as pd

        df = pd.DataFrame({'col1': [1, 2, 3], 'col2': [4, 5, 6]})
        df.to_csv('file.txt', index=False, sep='\t')
```

Reading Excel Files using Pandas:

```
In [ ]: import pandas as pd

        df = pd.read_excel('file.xlsx', sheet_name='Sheet1')
```

Writing to Excel Files using Pandas:

```
In [ ]: import pandas as pd

        df = pd.DataFrame({'col1': [1, 2, 3], 'col2': [4, 5, 6]})
        df.to_excel('file.xlsx', sheet_name='Sheet1', index=False)
```

Reading a Text File URL:

```
In [ ]: import urllib.request

        url = 'https://www.example.com/file.txt'
        with urllib.request.urlopen(url) as f:
            contents = f.read().decode('utf-8')
```

Writing to a Text File URL:

```
In [ ]: import urllib.request

        url = 'https://www.example.com/upload'
        data = b'Hello, World!'
        req = urllib.request.Request(url, data=data, method='POST')
```

```
with urllib.request.urlopen(req) as f:
    response = f.read().decode('utf-8')
```

Reading a File in Chunks:

```
In [ ]: chunk_size = 1024 # 1 KB

with open('file.txt', 'rb') as f:
    while True:
        chunk = f.read(chunk_size)
        if not chunk:
            break
        # Process the chunk
```

Skipping Header while Reading a Text File:

```
In [ ]: with open('file.txt', 'r') as f:
        next(f) # Skip the header line
        for line in f:
            print(line)
```

Checking if a File Exists:

```
In [ ]: import os

file_path = 'file.txt'
if os.path.exists(file_path):
    print('File exists')
```

Getting the Size of a File:

```
In [ ]: import os

file_path = 'file.txt'
size = os.path.getsize(file_path)
print(f'Size of file: {size} bytes')
```

Getting the Last Modified Time of a File:

```
In [ ]: import os
import time

file_path = 'file.txt'
timestamp = os.path.getmtime(file_path)
last_modified = time.ctime(timestamp)
print(f'Last modified: {last_modified}')
```

Creating a Directory:

```
In [ ]: import os
dir_path = 'directory'
os.mkdir(dir_path)
```

Removing a File:

```
In [ ]: import os
```

```
file_path = 'file.txt'  
os.remove(file_path)
```

Renaming a File:

```
In [ ]: import os  
  
old_name = 'old_file.txt'  
new_name = 'new_file.txt'  
os.rename(old_name, new_name)
```

Copying a File:

```
In [ ]: import shutil  
  
src_path = 'source/file.txt'  
dst_path = 'destination/file.txt'  
shutil.copy2(src_path, dst_path)
```