

In the name of Allah

Hello Everybody

Let's get started!

Files

Using files in Python involves various operations, including opening, reading, writing, and closing files.

Opening a File

You can open a file using the `open` function, specifying the file's path and the mode in which you want to open it (e.g., read, write, append).

```
# Open a file for reading  
file = open('example.txt', 'r')
```

Modes

The modes you can use include:

'r': Read (default mode) - Opens the file for reading.

'w': Write - Opens the file for writing (creates a new file or overwrites an existing file).

'a': Append - Opens the file for writing (creates a new file or appends to an existing file).

```
# Open a file for reading  
file = open('example.txt', mode='r')
```

Reading from a File

To read from a file, you can use methods like `read`, `readline`, or `readlines`

```
# Open a file for reading  
file = open('example.txt', 'r')
```

```
# Reading file  
line = file.readline()  
while line:  
    print(line)  
    line = file.readline()
```

Closing a File

It's essential to close the file when you're done with it using the `close()` method or by using a `with` statement, which automatically closes the file when the block exits

```
file.close()

# or

with open('example.txt', 'r') as file:
    # Perform file operations

# File is automatically closed when exiting
the `with` block
```

Writing to a File

To write to a file, you can use methods like `write` or `writelines`.

```
with open('output.txt', 'w') as  
    output_file:  
        output_file.write('Hello, World!\n')  
        output_file.write('This is a sample.')
```


Iterating Through Lines in a File

You can iterate through lines in a file using a for loop.

```
with open('example.txt', 'r') as file:  
    for line in file:  
        print(line)
```

That's all for today!