File handling is an important part of any web application.

Python has several functions for creating, reading, updating, and deleting files.

File Handling

The key function for working with files in Python is the open() function.

The open() function takes two parameters; *filename*, and *mode*.

There are four different methods (modes) for opening a file:

"r" - Read - Default value. Opens a file for reading, error if the file does not exist

"a" - Append - Opens a file for appending, creates the file if it does not exist

"w" - Write - Opens a file for writing, creates the file if it does not exist

"x" - Create - Creates the specified file, returns an error if the file exists

Syntax

To open a file for reading it is enough to specify the name of the file:

f = open("demofile.txt")

## Open a File on the Server

To open the file, use the built-in open() function.

The open() function returns a file object, which has a read() method for reading the content of the file:

### **Example**

f = open("demofile.txt", "r")  
print(f.read())

## Read Only Parts of the File

By default the read() method returns the whole text, but you can also specify how many characters you want to return:

f = open("demofile.txt", "r")

print(f.read(5))

## Read Lines

You can return one line by using the readline() method:

### **Example**

Read one line of the file:

f = open("demofile.txt", "r")  
print(f.readline())

By calling readline() two times, you can read the two first lines:

### **Example**

Read two lines of the file:

f = open("demofile.txt", "r")  
print(f.readline())  
print(f.readline())

## Close Files

It is a good practice to always close the file when you are done with it.

### **Example**

Close the file when you are finish with it:

f = open("demofile.txt", "r")  
print(f.readline())  
f.close()

## Write to an Existing File

To write to an existing file, you must add a parameter to the open() function:

"a" - Append - will append to the end of the file

"w" - Write - will overwrite any existing content

EX

f = open("demofile2.txt", "a")

f.write("Now the file has more content!")

f.close()

#open and read the file after the appending:

f = open("demofile2.txt", "r")

print(f.read())

## Create a New File

To create a new file in Python, use the open() method, with one of the following parameters:

"x" - Create - will create a file, returns an error if the file exist

"a" - Append - will create a file if the specified file does not exist

"w" - Write - will create a file if the specified file does not exist

### **Example**

Create a file called "myfile.txt":

f = open("myfile.txt", "x")