

# **File Handling**



# File Handling

File handling in python is all about managing files in your system.

In Python a file operation takes place in the following order:

1. Open a file
2. Read or write (perform operation)
3. Close the file

## **open()**

open is a built in function in python which is used to open a file.

### *Syntax :*

```
open(path_with_file_name, mode)
```

### **Example:**

```
f = open("C:/Python3/README.txt", "r")  
f.close()
```

## **with:**

Using with command file operations become convenient to execute and we don't have to close the files explicitly

### **Example:**

```
with open("C:/Python3/README.txt", "w") as f:  
    f.write("File handling demo.")
```

## Modes for Opening files

Mode	Description
r	opens an existing file to read-only mode
rb	opens the file to read-only in binary format
r+	opens the file to read and write both but will not override
rb+	opens the file to read and write both in binary format but will not override
w	opens the file to write only. It overwrites the file if previously exists or creates a new one if no file exists with the same name.
wb	opens the file to write only in binary format. It overwrites the file if it exists previously or creates a new one if no file exists.
w+	opens the file to write and read data. It will override existing data.
wb+	opens the file to write and read both in binary format
a	opens the file in the append mode. It will not override existing data. It creates a new file if no file exists with the same name.
ab	opens the file in the append mode in binary format.
a+	opens a file to append and read both. It will not override existing data. It creates a new file if no file exists with the same name.
ab+	opens a file to append and read both in binary format.

# Docstrings



# Docstrings

Whenever we create a custom function it's convenient to add some description about the functionality of the defined function.

Docstrings gives us a way of adding documentation with Python modules and functions.

## **Docstring Declaration:**

The docstrings are declared using `'''triple single quotes'''` or `"""triple double quotes"""` just below the class, method or function declaration.

## **Accessing Declaration:**

Docstrings can be accessed using the `__doc__` method using help function.

# Modularization



# Modularization

Imagine that you are working as a data scientist and on a daily basis you have to generate a particular report regarding the behaviour of today's data quality.

For doing this task he has to implement a function (called `data_quality`) but in 10 different scripts for different data sources.

In each of these scripts he has to write and define that function.

**What if he can directly use that function in his code without defining it every time?**

## Modularization:

Modularization helps us to define our own custom function and later import and use that function whenever we require it so that our codes can be re-used.

## Reusing our Code:

1) Create some user-defined function in .py script.

Example : You have created a function `barplot` to create a bar plot of values in a list in a python script called as `function_lib.py`

2) Now whenever I have to use this function `barplot` then I can simply write:

```
from function_lib import barplot
```

## Note:

You have to place your python script in the same folder in which you are writing your code.