

Files in Python

* In python, files are used to save the data, so that they can be used next time or else to share them to other peers.

opening a file:

→ In Python, files can be opened using a built in method called **open** function.

Modes of opening file:

* '**r**' → Read only

- This Read only mode allows the user to Read the file but don't support writing.

* '**w**' → write only

- This mode allows user to write a new file (or) if any data is already found in the file, then we can replace it with new data completely using this mode.

* 'a' → Append

- This is same as 'w' mode. But Instead of replacing previous data in the file, It will try to add new data to the next of Already Available data.

* 'r+' → Read & write

- This mode supports both Read & write modes.

Let's try to open a file and write in it:

F = open("text.txt", "w") → write mode
File name

It will be Automatically created.

F.write("Hello")

→ method used to write

* In order to read this file, we must first close it and again open it in Read mode

F.close() → method used to close.

Now, Let's read it

```
F = open("text.txt", "r")
```

F.read() → method used to Read

output: 'Hello'

Initially Before reading, the cursor will be at First Index (H) of the file, But at the end it moved out of file.

So, if we use read() next time, it will show blank.

Let's try it:

```
F.read()
```

output: ''

(Inorder to send the cursor back we have to use seek() and set the index from where we want to read)

F.seek(0) → I set Index to be zero

output: 'Hello'

F.seek(2)

output: 'llo'

Now try to write some more to the file:

* First we have to close the file.

f.close()

* Now open it in 'write' mode

F.open("text.txt", "w")

F.write("world")

f.close()

* Now open it to Read

F.open("text.txt", "r")

F.read()

#output: 'world'

(As we can see the term
Hello is Replaced by world)

* But if we want to keep both old and
new data in it, we can use 'a' Append Mode.


```
F.close()
```

Let's open it in 'a' mode:

```
F.open("text.txt", 'a')
```

```
F.write("Hello")
```

→ Appends 'Hello' to already available text of our file.

```
F.close()
```

Let's open it and see:

```
F.open("text.txt", "r")
```

```
F.read()
```

output: 'worldHello'

Before ending our coding, Always remember to close the file.

```
F.close()
```