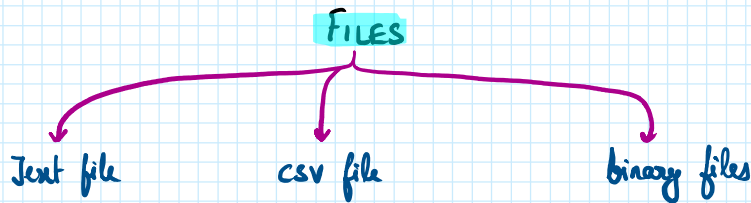


### 3. File Handling

13 October 2023 11:40



#### OPEN FUNCTION

`file-object = open("file-name/file address", "access-mode")`

- access mode → or by default
- returns an object of type `TextIOWrapper`

#### NOTE: with clause

```
with open(...) as f_obj:
    BODY
```

File is closed automatically once body is executed

#### READ FUNCTIONS

##### ① read

`file-object.read(n)`

Returns a single string with entire file's data

If `n` is specified as some number, it reads "`n`" characters

##### ② readline

`file-object.readline(n)`

Returns a single string with a single line from the file

`n` → same function as `read`.

Each time `readline()` is used, it returns the next line in the file until there is nothing left to read, at which point it returns an empty string.

#### NOTE: Iterating through file object

```
test.txt
this is a test.
what is this?
```

```
f → file object
for i in f:
    print(f.readline())
```

#### OUTPUT

what is this?

The second line gets printed as the first line is taken by the loop variable "`i`". After "`i`" takes the first line, the file pointer is at the second line when `readline()` is called.

##### ③ readlines

Returns a list with each element of the list being one line of the file as

### (3) readlines

Returns a list with each element of the list being one line of the file as a string

## FILE POINTER FUNCTIONS

### ① seek

`f-object.seek(position)`

Positions file cursor at specified position.

0 → beginning of the file.

### ② tell

Returns current file pointer position

## WRITE FUNCTIONS

### ① write

`f-obj.write(value)`

Appends value to the end of the file content. Only takes a string value

### ② print

`print(value, file=f-obj)`

If "file" parameter is specified, then print will do the same thing as `write()` function. However, cursor in the file by default will go to the next line, as default value of "end" is "\n".

## CSV FILES

csv module → csv file specific commands

### csv.reader()

`csv.reader(file-name)`

Returns a lazy object.

When you iterate through it, every line is a list which has each comma separated value as an element

## FILE OBJECT ATTRIBUTES

- `f-obj.name` → returns system name of file
- `f-obj.mode` → returns mode of file

- `f_obj.mode` → returns mode of file
- `f_obj.closed` → returns a Boolean indicating if file is closed