

# Python Data Persistence cheatsheet

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## Access Modes

1. `r`: read-only
2. `r+`: both read and write
3. `w`: write-only - overwrites the file
4. `w+`: both read and write - overwrites the file
5. `a`: write-only - appends to the file
6. `a+`: both read and write - appends to the file

## Opening a file

`open(file_name, *access_mode)` opens a file

```
file = open("my_file.txt", "r")
```

## Reading a file

`read()` reads a files contents `readlines()` reads the contents as a list (each line is a string in the list)

```
file = open("hello.txt", "r")
contents = file.read()
print(contents)

file = open("people.txt", "r")
lines = file.readlines()
for line in lines:
    print(line)
```

## Writing a file

`write()` writes to the file with no accessor mode, will write at the end of the file.

```
file = open('people.txt', 'w')
file.write('Susan')
```

## Closing a file

`close()`

```
file = open('people.txt', 'w')
file.write('Susan\n')
file.close()
```

## Context Manager

**with** python keyword for creating a context manager

```
items = ['apple', 'grapes', 'orange', 'banana']
with open('people.txt', 'w') as items_file:
    for item in items:
        items_file.write(item + '\n')
```