


→ Modules & imports in python

→ Arrays

→ Interpretation of python

→ file i/o (input / output)

Q → What is a python module?

↳ Files containing some python code
↓
(.py)

↳ A module can be made by a user & few modules are default provided to us by python

- ① In built modules
- ② user defined //

In built modules \rightarrow Given to us by python to perform
some handy tasks (Math operations, custom random
funcs, etc...)

\hookrightarrow Math module

\hookrightarrow What to do if we require a module ??

`import module_name`

Array Module

↳ Array is a data structure, which stores
homogenous elements in contiguous memory location

import array

x = array.array ('i', [2, 3, 15, 19])

module function type elements

'i'

...

↳ Python is an interpreted language.

↳ When you write python file.py → python converts your source code into an intermediate code.
Then this intermediate code is converted into machine understandable code.

original
source
code

file.py

compilation



intermediate
level
code

file.pyc

python
byte
code

python
virtual
machine

machine
understands
form
~~bits~~

interpreter

python -m compileall

~~Java~~

> py

↳ Machine independence / platform independence

Python, Java

software → code ✓
 ↳ ubuntu ✓

C, C++ we don't have platform independence



File I/O \rightarrow file input output

\rightarrow to read or write into a file we use `open()`

function

file obj = `open('i.txt', 'r')`

\downarrow filename

\downarrow access mode

where you want to read/write/append etc

'r' → opens in read only mode

'rt' → opens for reads & writing both

'w' → write only - if the file exists, it will
overwrite everything, else creates a new file

(wt) → read & write both.

a → append.

⋮

fopen (— , (a+))

file pointer
cursor

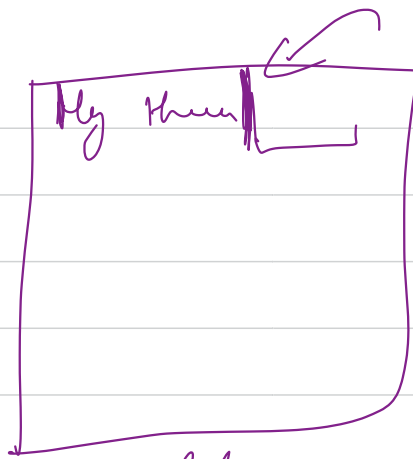
f.write("my run")

f.read()

fopen (— , 'w')

f.write("xyz")

f.read()



f

f.seek(0)

