File Handling

Python Program

Python Shell

```
x=3
print(x)
print(x+7)
```

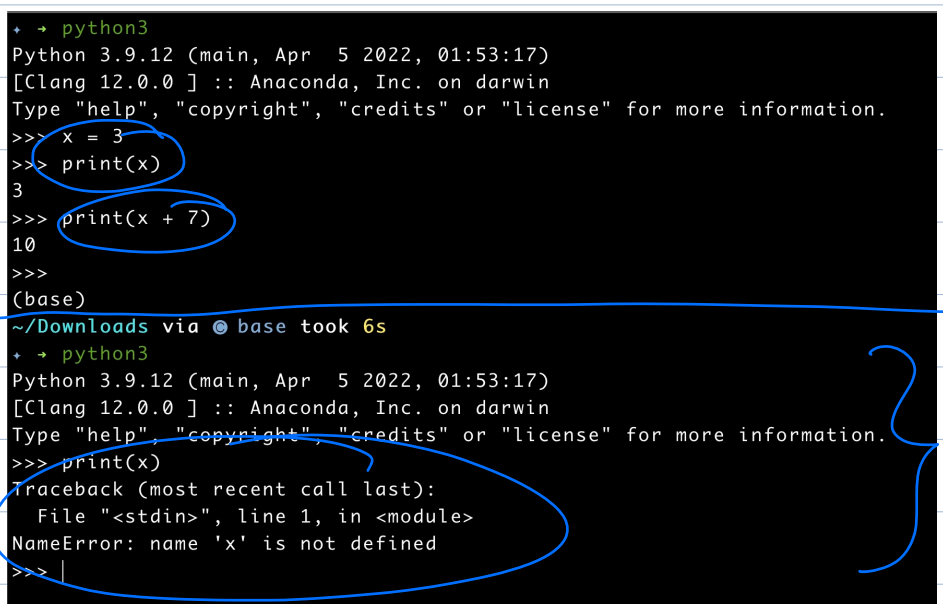
=>

```
3
10
```

Restart

```
print(x)
```

=> Error



Memory

RAM

⇓

Temporary

Quit

=> Erased

Memory

Primary

RAM

Temporary / Volatile storage

Secondary

HDD / SSD

Persistent / Permanent storage

Hard Disk Drive (HDD)

Solid state Drive (SSD)

Text File

abc.txt

a b c

↑

Text

How ??

SSD

KB
MB
GB
=> File size measured in Bytes

Byte

ASCII encoding

ASCII => 256 characters.

1 char takes 1 byte of storage.

int

97 98 99

1 byte 0 1

binary => computer can understand only 0/1.

smallest unit of memory.

1 byte = 8 bits

(QQ) What is an .exe file?

Executable files

contains Byte array

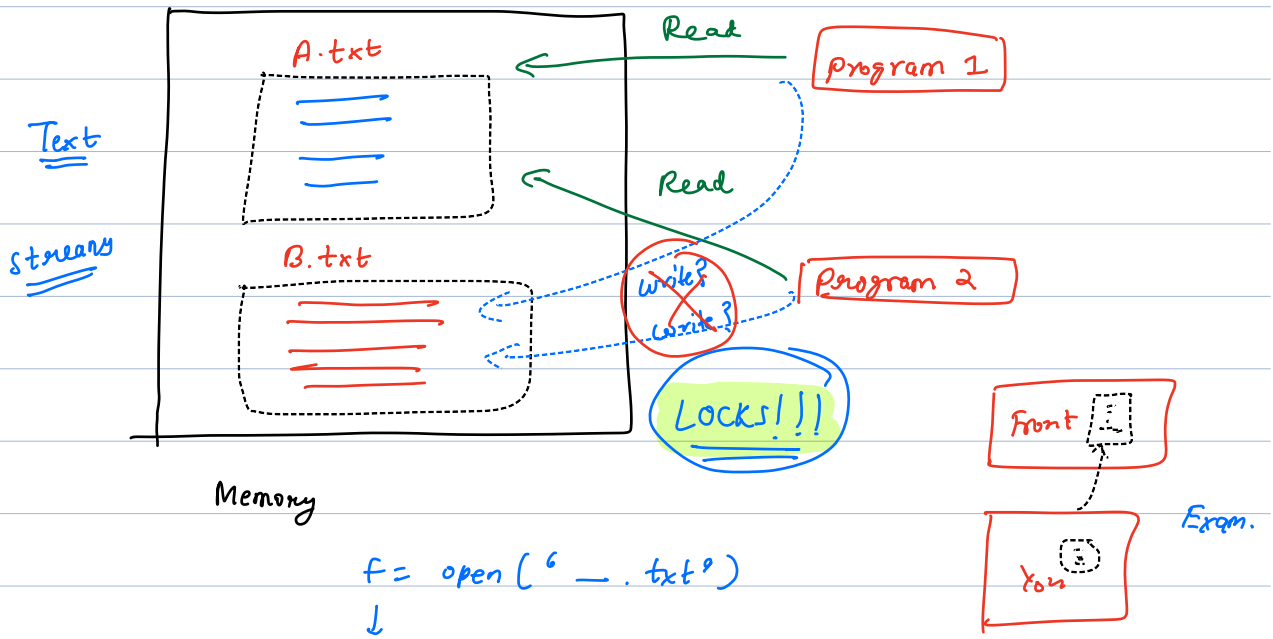
00110110	10001010	11110000	11111110

4 bytes

Diff. encodings

=> UTF-8, Unicode, ANSI, ASCII, ---

Rich Text Editor

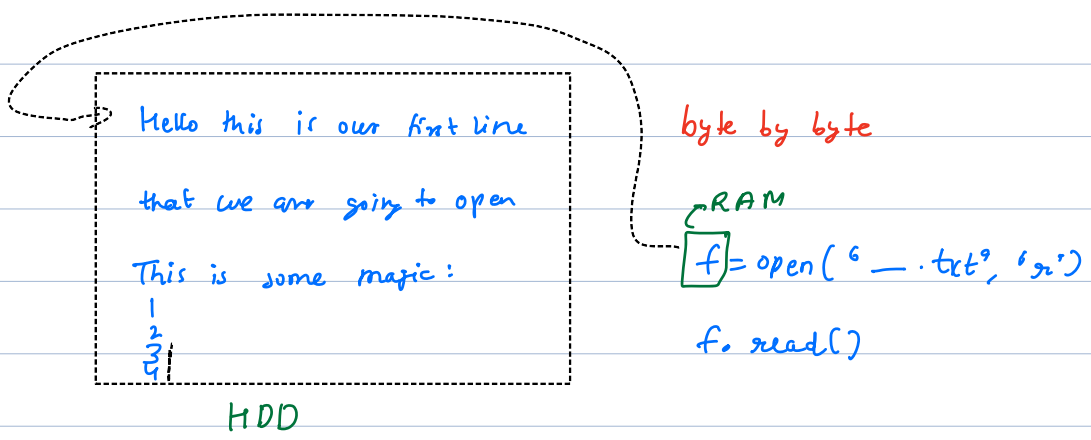


f = open('—.txt')

↓

TextIOWrapper

I/P O/P

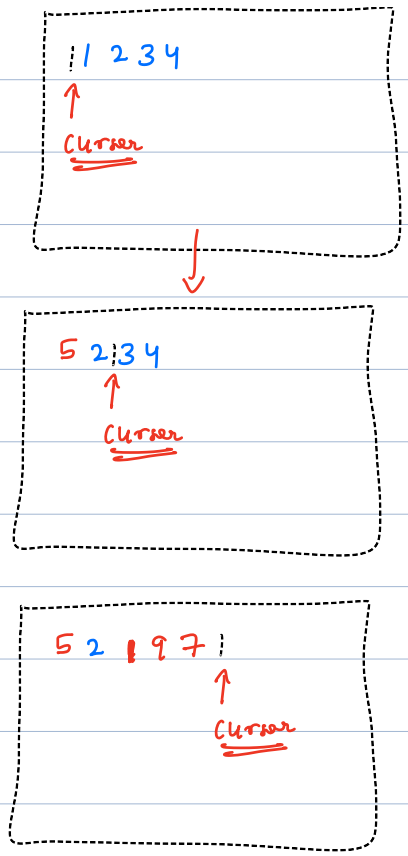


r+ mode

does not truncate

x.txt

f = open('x.txt', 'r+')



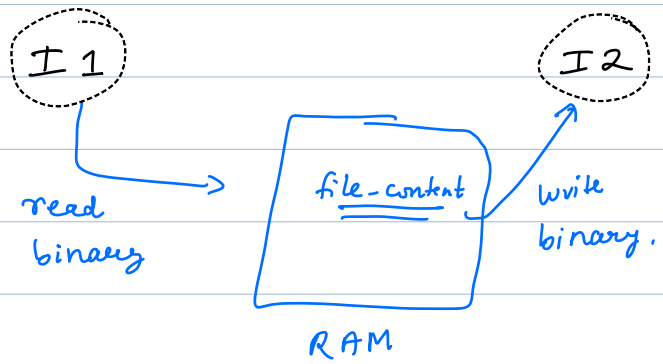

```
f.write('5')
f.close()
```

overrides the memory (in bytes)

```
f=open('x.txt', 'r+')
f.read(2)  # read 2 bytes
  ↳ 52
f.write('97')
f.close()
```

Image File

Copy



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f.read()