

Values in memory exist only while the program is running. When it ends, they are gone!

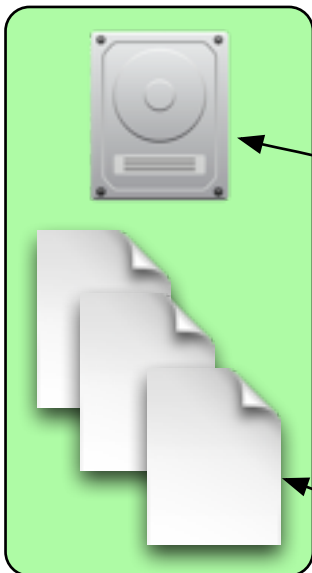


Heap

Stack

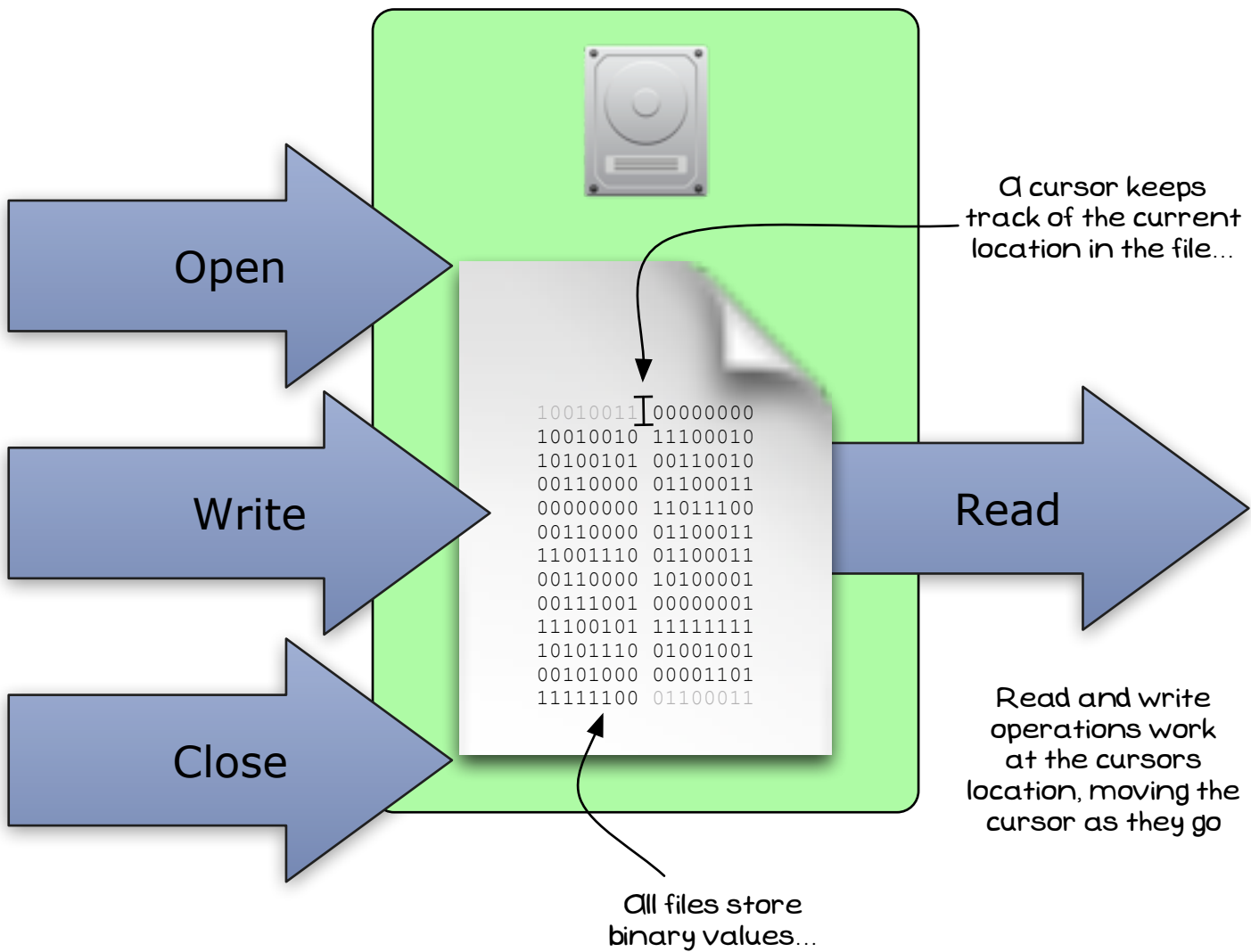
Code Area

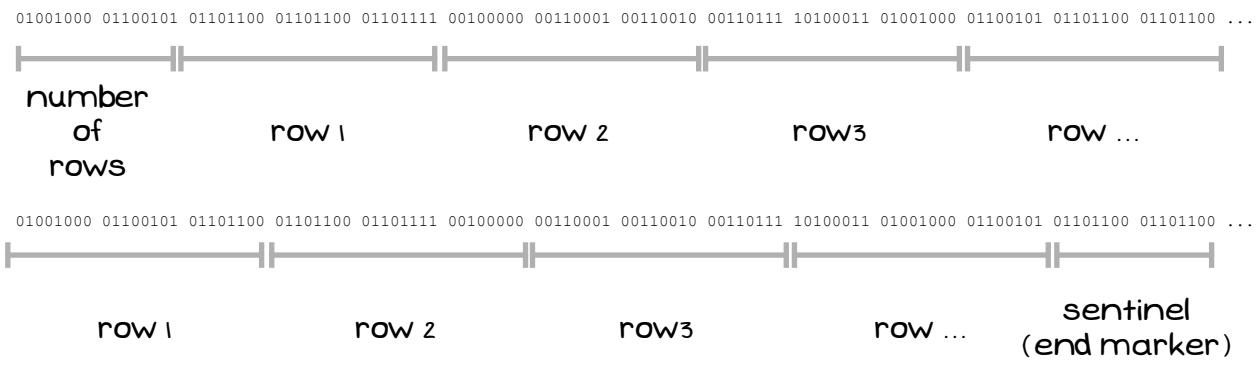
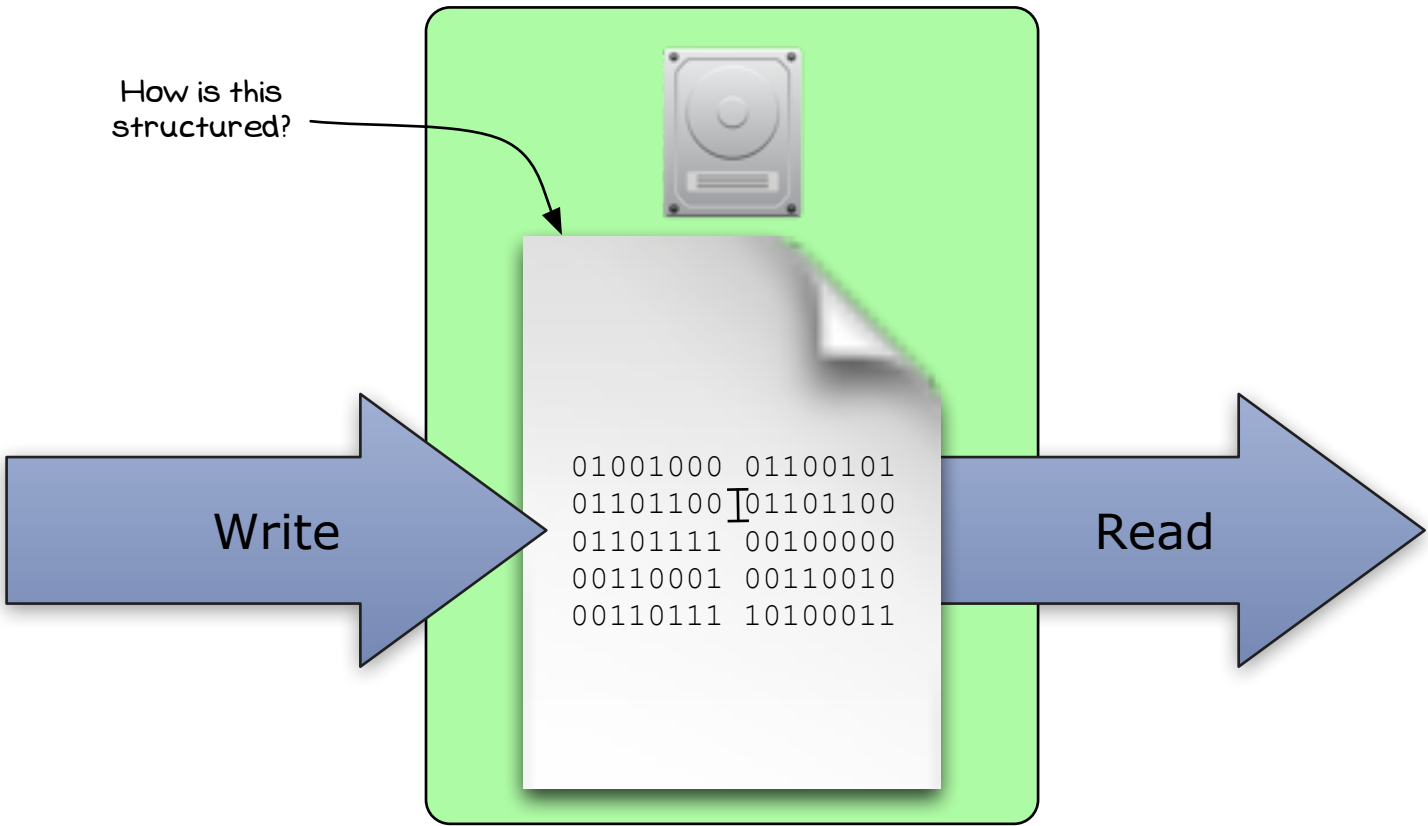
Global Variables



To persist (keep) values you need to save them...

by writing them into a file





In a text file the values can be read as textual characters



Character 'H'

Character 'e'

Write as Text

Read as Text

Text data is the same when written to a text or a binary file...

```
01001000
01100101
01101100
01101100
01101111
00100000
00110001
00110010
00110111
```

Character 'i'

Character '2'

Character '7'

Character 'H'

Character 'e'

Other values will differ...

Write as Binary

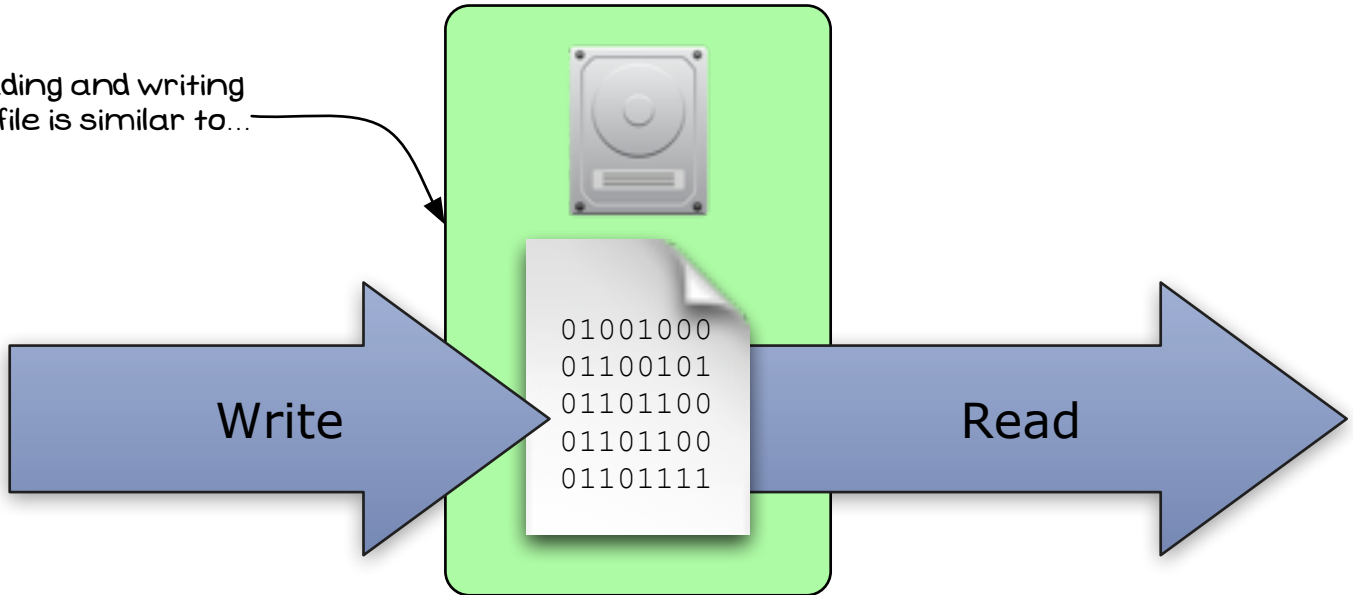
Read as Binary

```
01001000
01100101
01101100
01101100
01101111
01111111
```

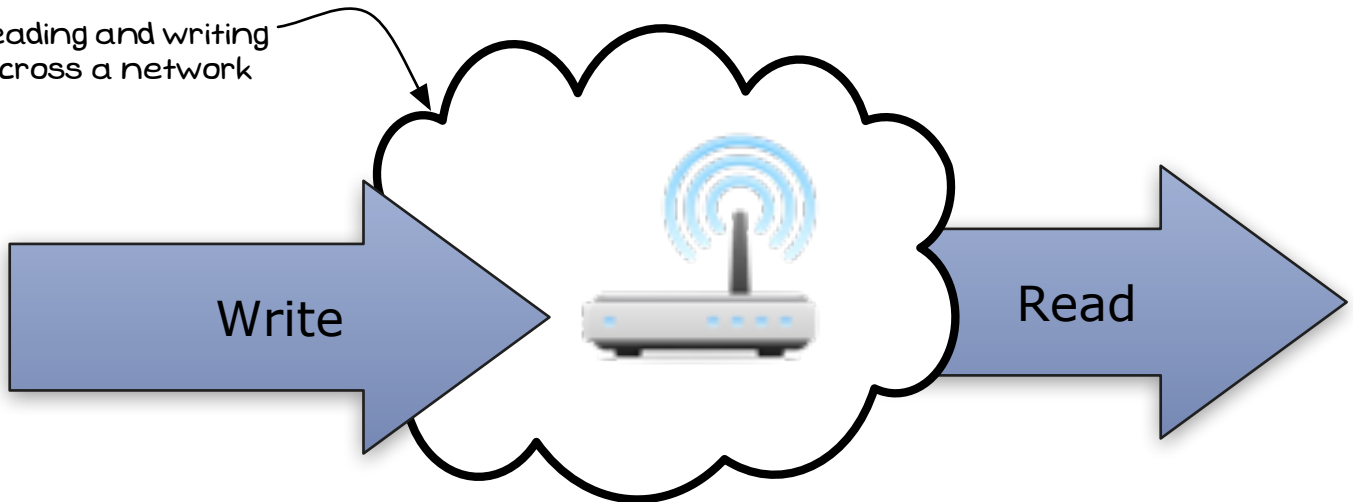
Value 127

In a "binary" file the values are stored directly as the binary values in the file

Reading and writing
to a file is similar to...



Reading and writing
across a network



or to the Terminal

