The Javascript Event Loop

Heap

Stack

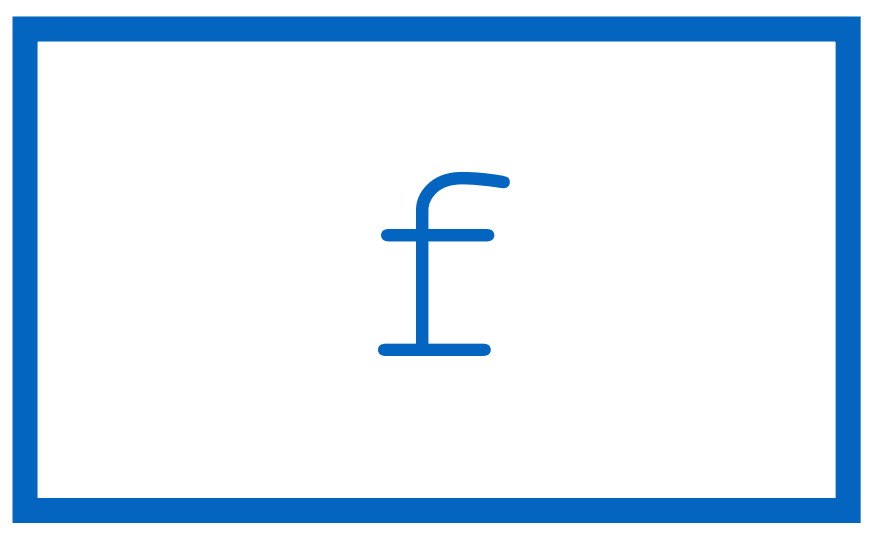
Synchronous API

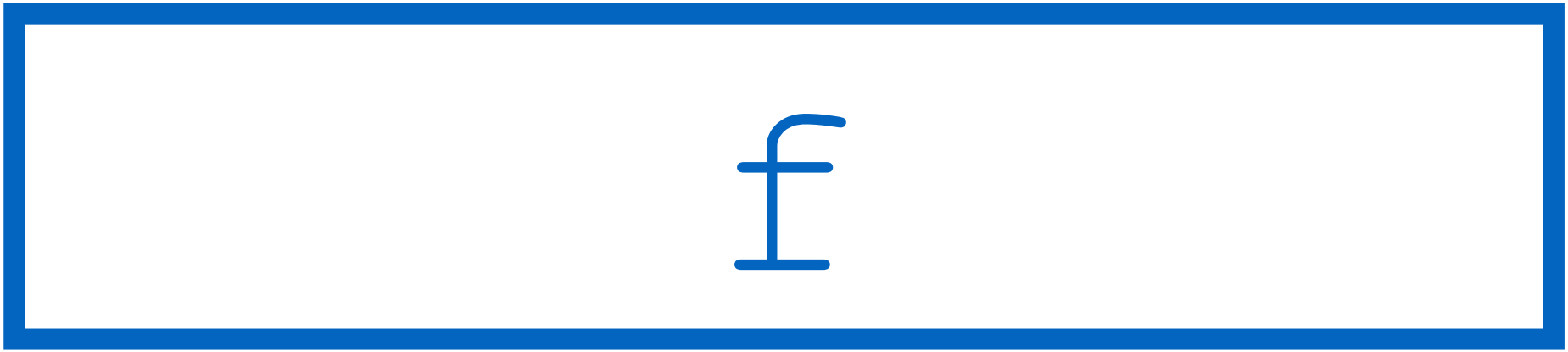
Asynchronous API

setTimeout(f,t)

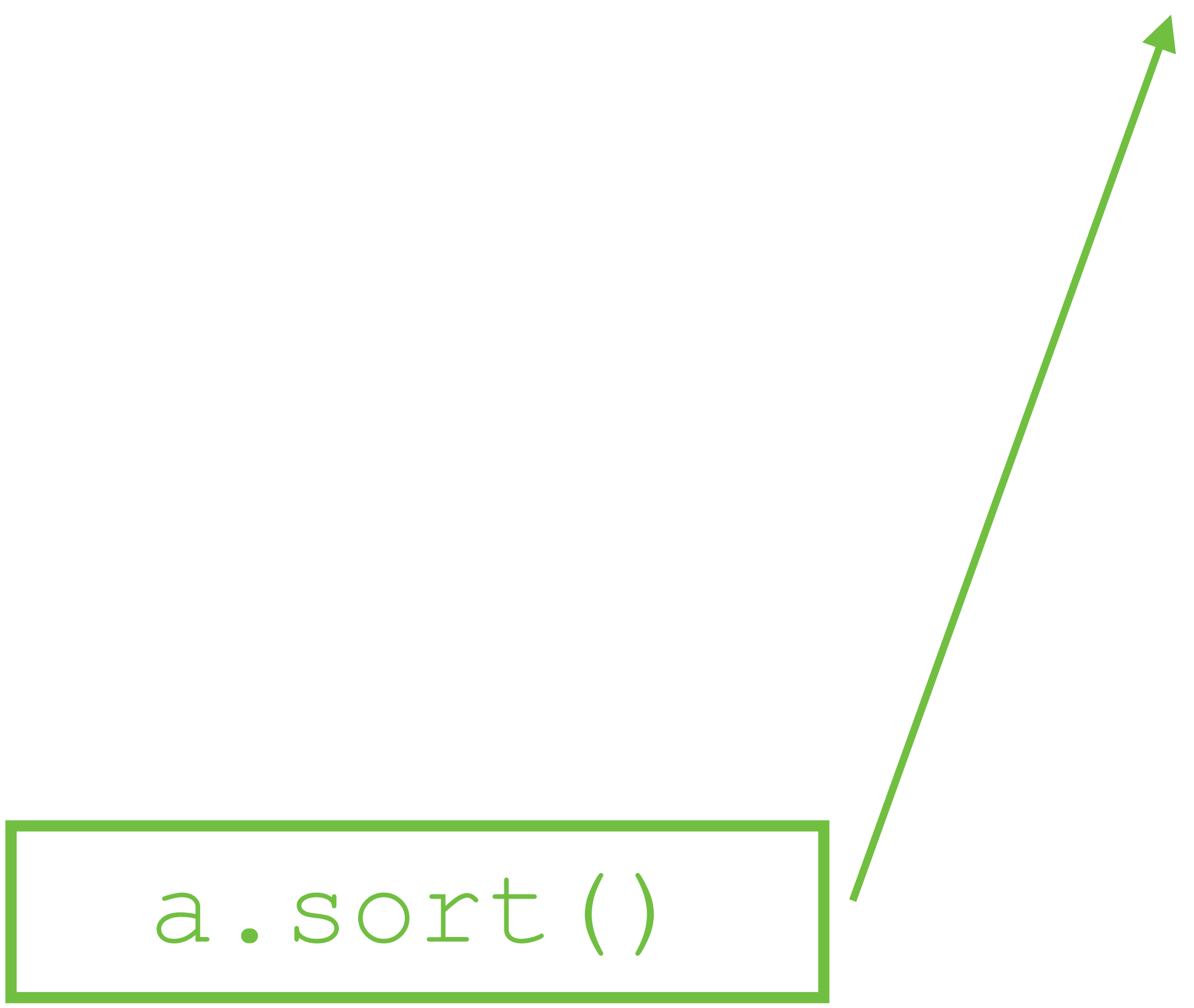
Array.sort(f)

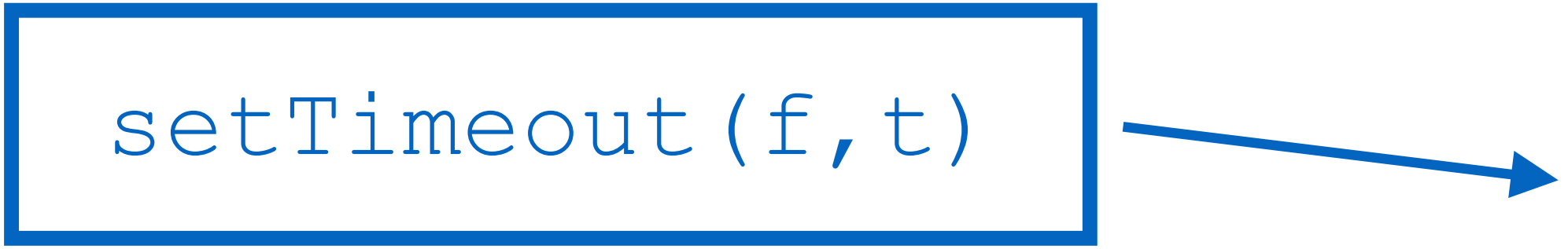
Array a





```
a=new Array()
```


a.sort()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```
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f

Multi-threaded vs Single-threaded

Multi-threading does necessarily means things are executed in parallel

➡ We only have one CPU !

So, why do we need multithreading ?

➡ Because programming languages have blocking I/O, and by default, programs wait for the I/O to be completed

But multithreading is expensive

- in terms of software design (synchronization)
- in terms of performances (context switch)

What is the alternative to multi-threading?

➡ Single-threaded with non-blocking I/O