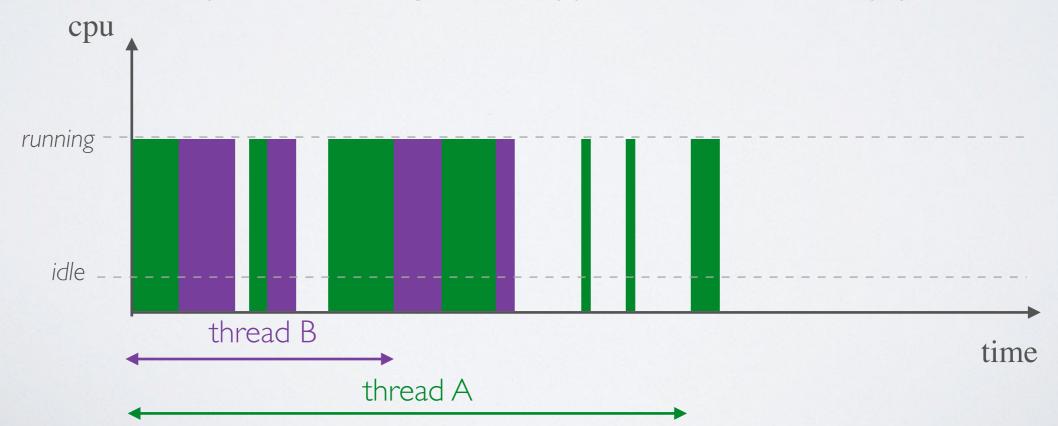
## Running threads concurrently

A CPU core will run multiple thread concurrently by running each thread for a little amount of time before switching to another one

## → Limited Direct Execution

The CPU will switch to another thread when either

- the running thread yields the CPU (non-blocking IO for instance)
- or the CPU stops the running thread (system clock interrupt)



## The advantages of concurrency

- ✓ From the system perspective better CPU usage resulting in a faster execution overall (but not individually)
- ✓ From the user perspective programs seem to be executed in parallel
- → It requires some mechanisms to manage and schedule these concurrent threads