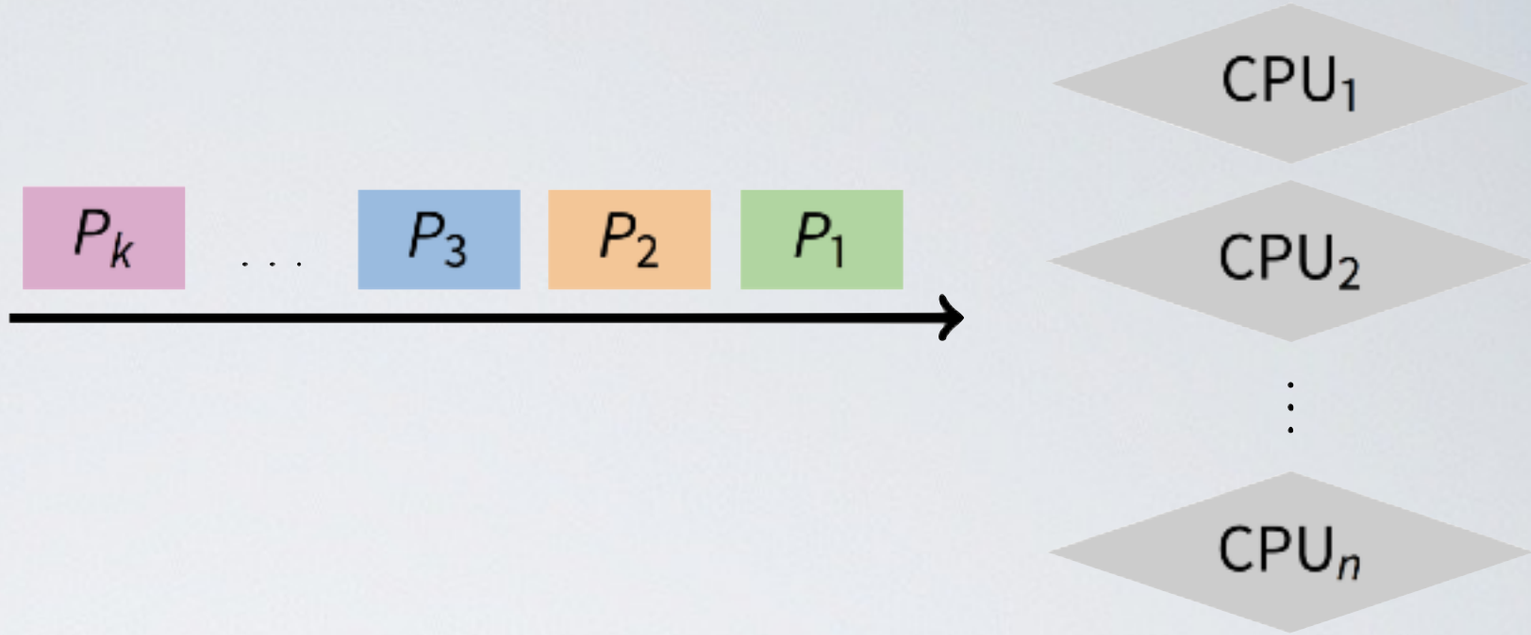
The scheduling problem



- n threads ready to run
- $k \geq 1$ CPUs

➡ Scheduling Policy
which jobs should we assign to which CPU(s)?
and for how long?

Non Goals : Starvation

Starvation is when a thread is prevented from making progress because some other thread has the resource it requires (could be CPU or a lock)

- ➡ Starvation is usually a side effect of the scheduling algorithm
  - e.g a high priority thread always prevents a low priority thread from running
- ➡ Starvation can be a side effect of synchronization (forthcoming lecture)
  - e.g constant supply of readers always blocks out writers