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10.9

updated on 10.21

# First Come First Serve (FCFS)

- non-preemptive algorithm, but support 

non-preemptive  
preemptive

FCFS  $\xleftrightarrow[\text{special case}]{\text{special case}}$  preemptive priority (link on ppt.) ^

- not a priority-based scheduling algorithm

⊙ simple but inefficient, good for long tasks, poor for short tasks

- starvation? **No!**

FCFS:

Task	Start Time	Burst Time
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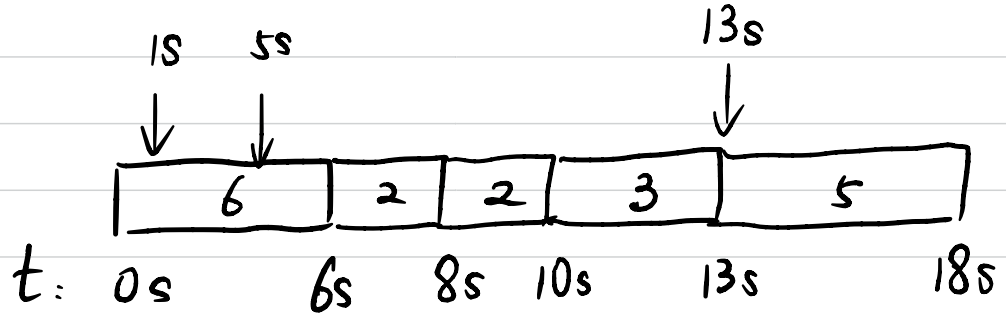
$T_1$	0	6
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$T_2$	1	2
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$T_3$	5	2
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$T_4$	5	3
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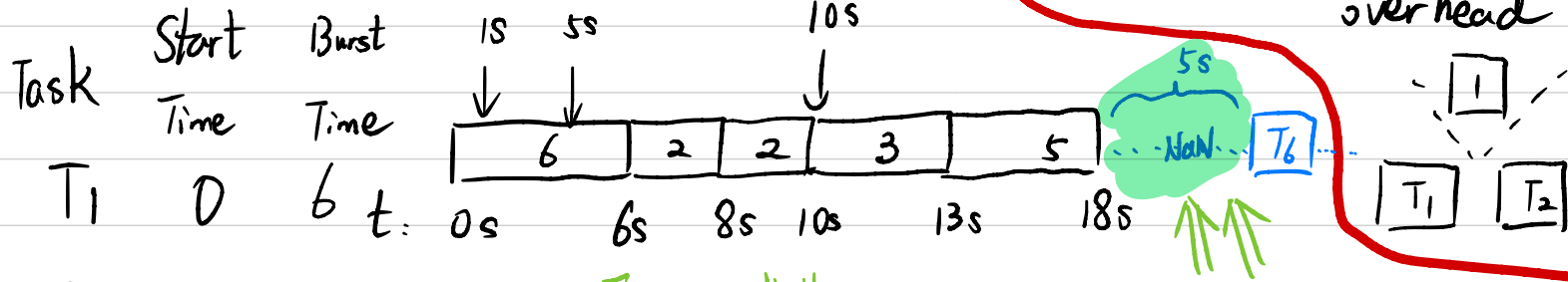
$T_5$	13	5
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||

Ending Time

FCFS:



For simplicity, this case won't happen  
The computer will be always busy until all tasks are done.

Ending time = start + Burst

- ① an array of structure
- ② Simpler way?

T<sub>5</sub>  
T<sub>4</sub>  
T<sub>3</sub>  
T<sub>2</sub>  
T<sub>1</sub>



create an array with index → stack?



pointer to an array → heap?

(ave) waiting time

(ave) turn around time