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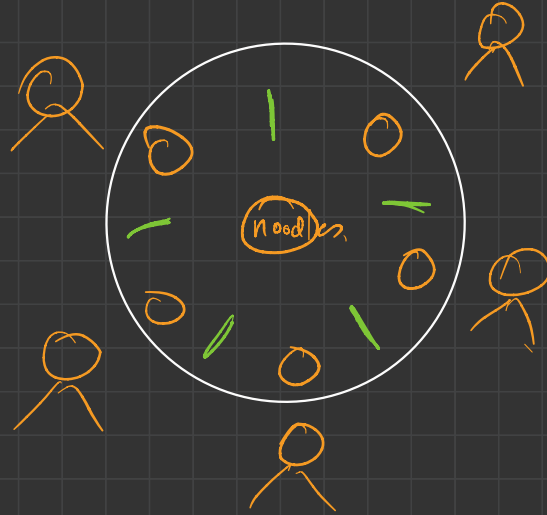
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# Lec-20

Dining philosophers  $\rightarrow$



- ④ 5-ph.
- ② noodles
- ⑤ 5 forks,

## Semaphores.

① each fork — semaphore (Binary sema.)

Semaphores fork  $[5] \{1\}$

② wait()  $\rightarrow$  fork  $[i] \Rightarrow$  ph  $[i] \xrightarrow{\text{acquire}}$

③ Release()  $\rightarrow$  fork  $[i] \rightarrow$  fork  $\rightarrow$  Release,  
=

Sol<sup>n</sup>

Ph[i]

do { mutex,

wait(fork[i]);

wait(fork[(i+1)%5]);

// eat  
*(Relent mutex)*

signal(fork[i]);

signal(fork[(i+1)%5]);

// think

} while (1);

i = 1

(i+1)%5

→ ②

C.S

