* The Time When the Network Becomes Idle
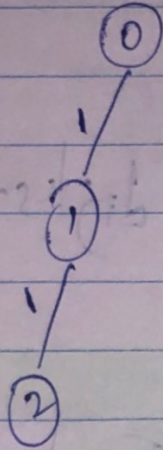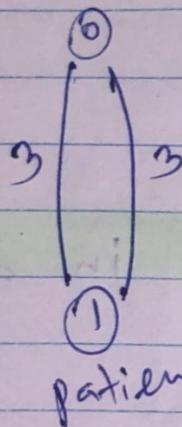
Note that weight is the same of graph.

∴ We can use bfs easily find distance from 0 to every other vertex.

when at $t=5$,

\# of extra msgs $= \frac{5}{2} = 2$

when $t=6$, initial arrive.

in $t+2$ first arrives

in $(t+2)+2$ second arrives

∴ extra time = extra. msgs * patience

∘∘ Bellman ford won't work → TLE

dijkstra works

patience = 2

$$O(V+E)$$
$$O(V)$$

$$O(V \log V + E)$$
$$O(V)$$

$$O(V \log V + E)$$
$$O(V)$$