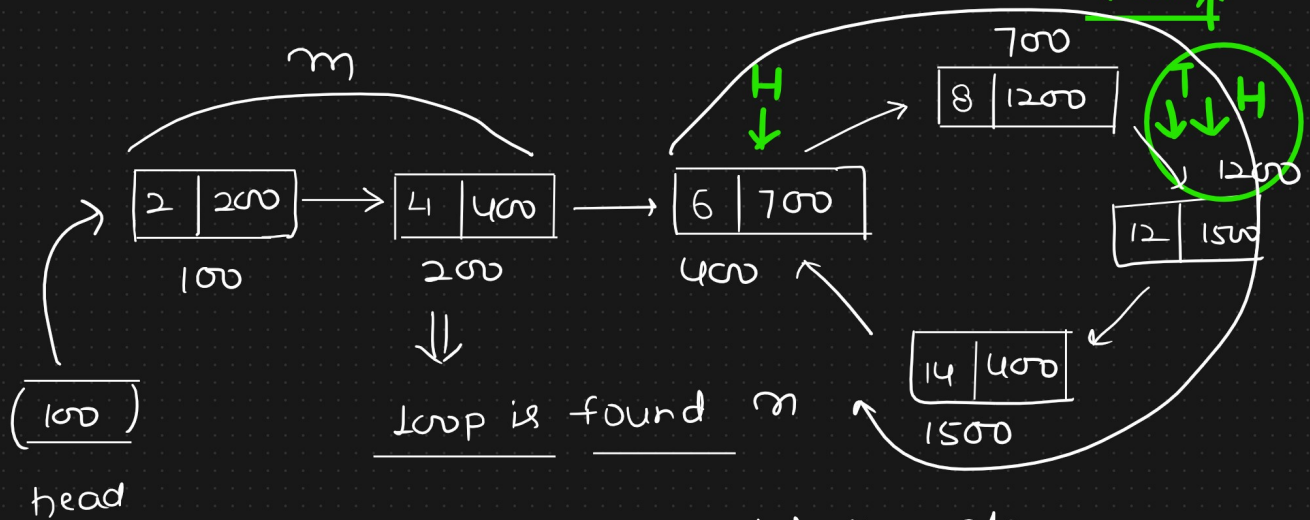


# Detection of Loop in Linked List

Meeting Point



## floyd's cycle detection algo

fast-ptr

↑

H → 2 nodes/iteration (fast & slow ptr)

T → 1 node/iteration

Meeting Point

slow-ptr

if  $H == T$

print("Loop is found")

if  $H == \text{None}$ :

print("Loop is not found")

$$N = m + m + C \times i \quad \text{--- (1)}$$

$$2N = m + m + C \times j \quad \text{--- (2)}$$

$$\text{eq (2) - eq (1)}$$

$$N = C(j-i)$$

↳ valid