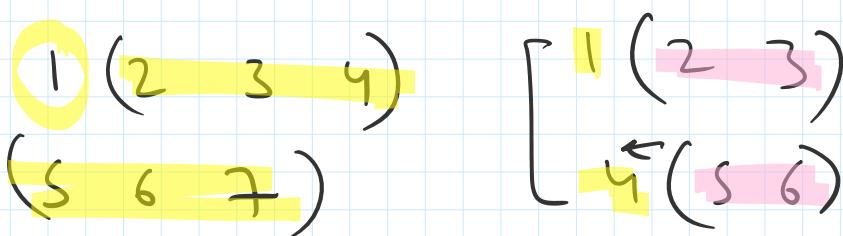
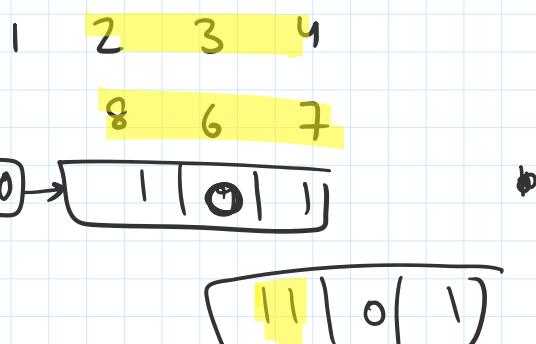
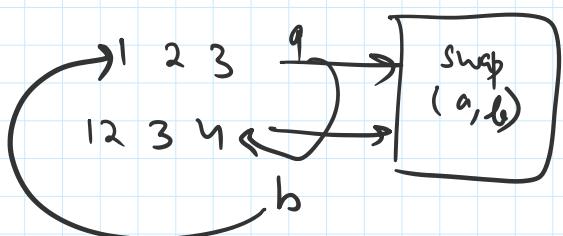
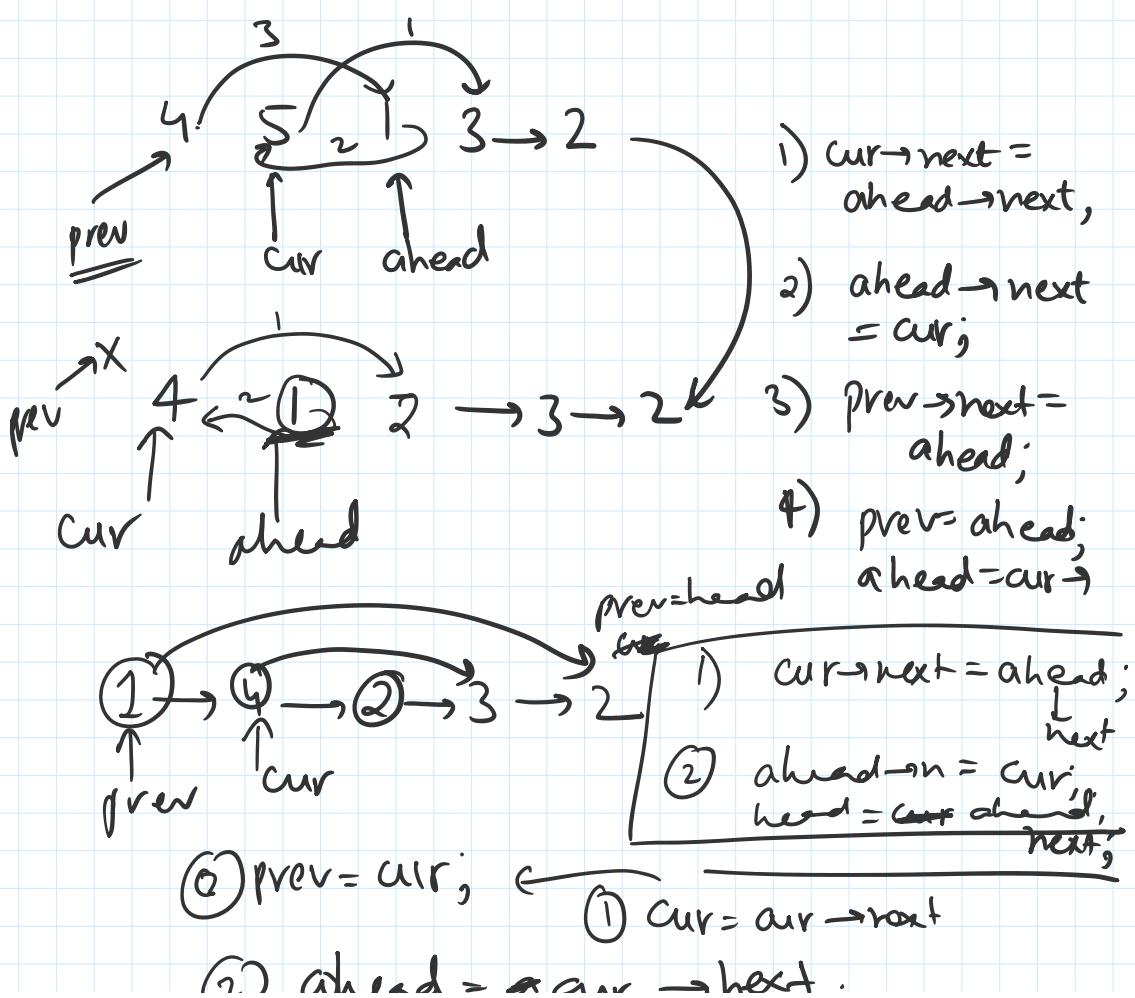
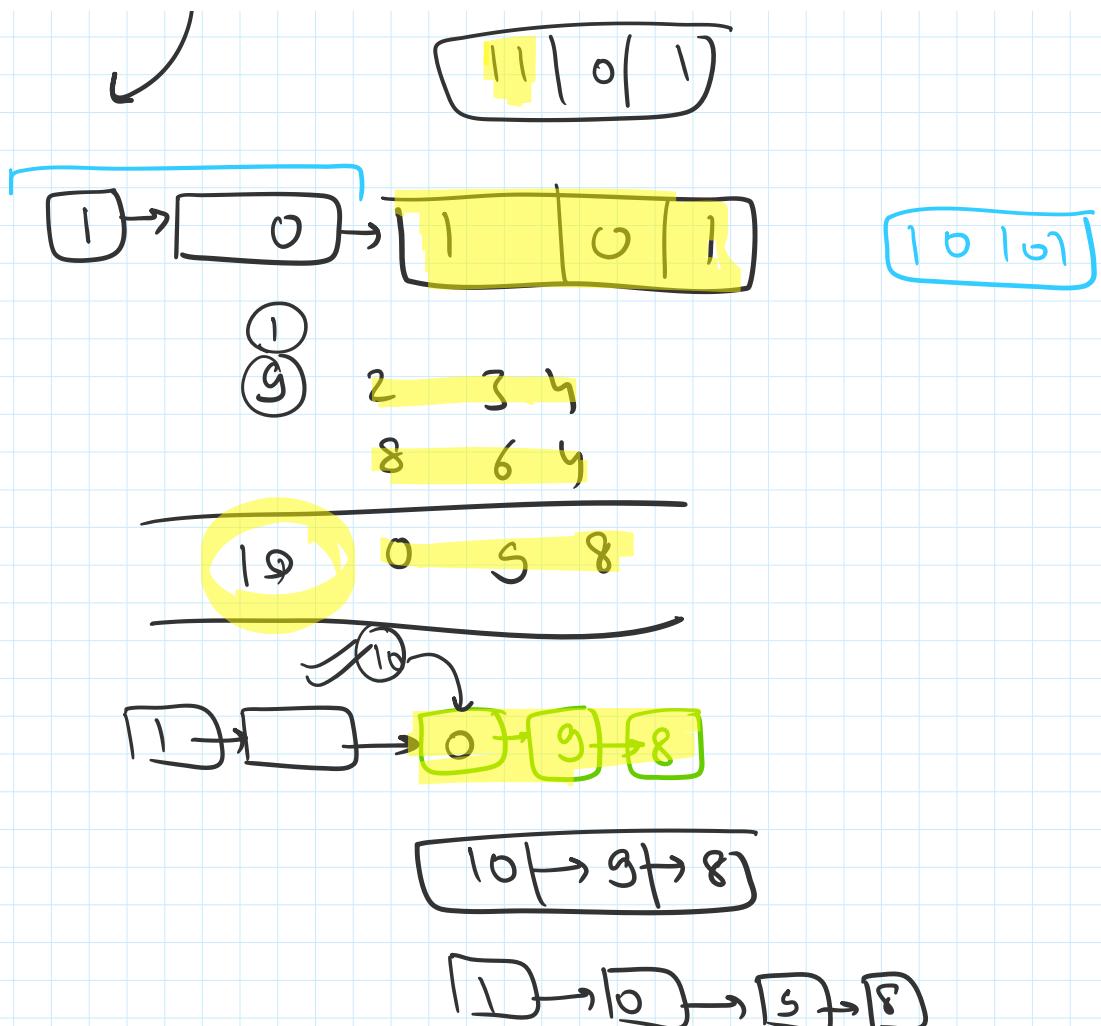
Add one

$$\begin{array}{ccccccc} 1 & 2 & 3 & 9 & 8 & 9 & 9 \\ \hline \end{array}$$



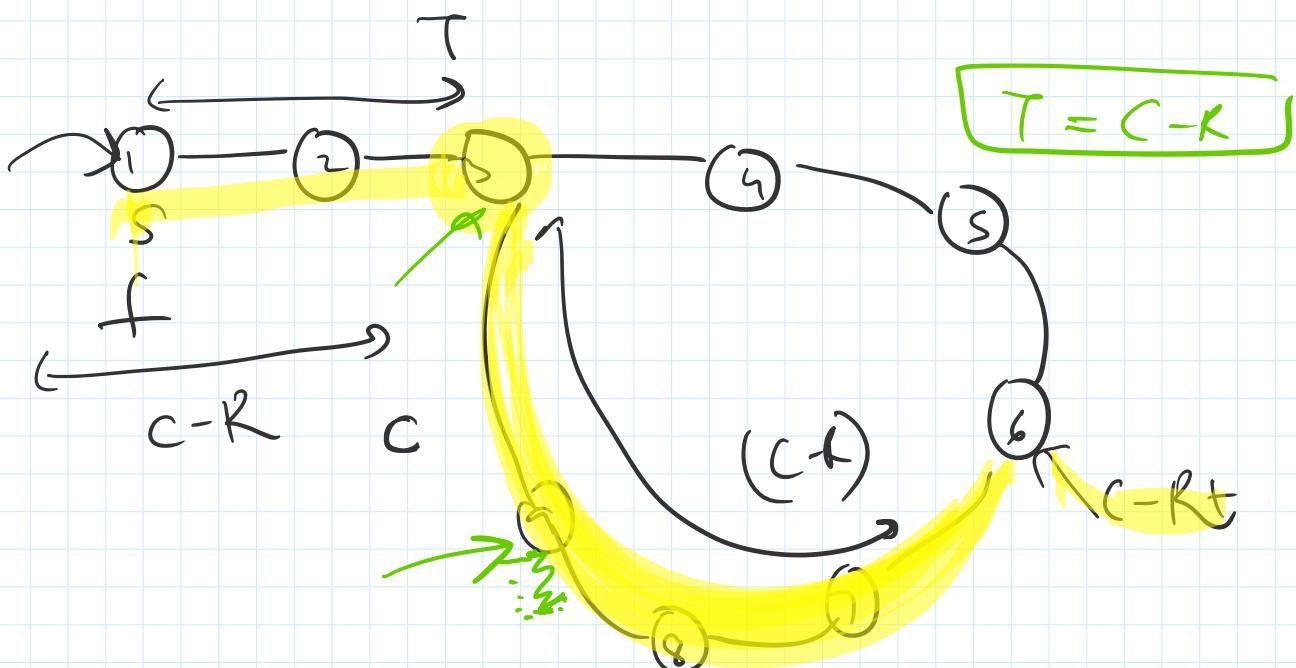
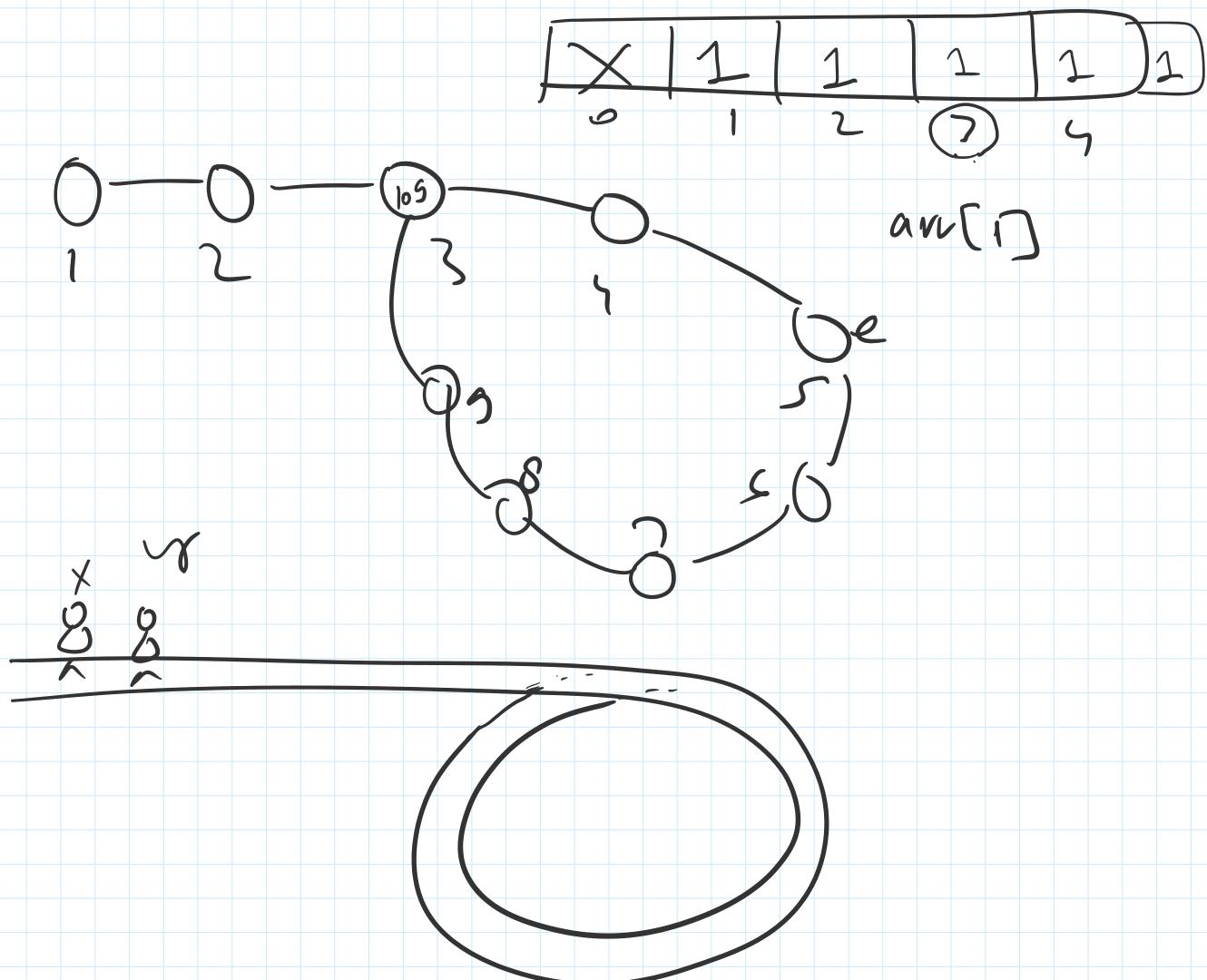
$$\begin{array}{ccc} 1 & 2 & 3 \\ \hline x & x & x \end{array} \rightarrow a \quad \rightarrow b$$





① cur = cur \rightarrow root

② ahead = cur \rightarrow next;



$$\text{Initial pos of } c = T$$

$$T = RC + R$$

Initial pos of $C = T$

Initial pos of $R = R$

$$T = RC + R$$

$$\underline{\underline{C-R}}$$

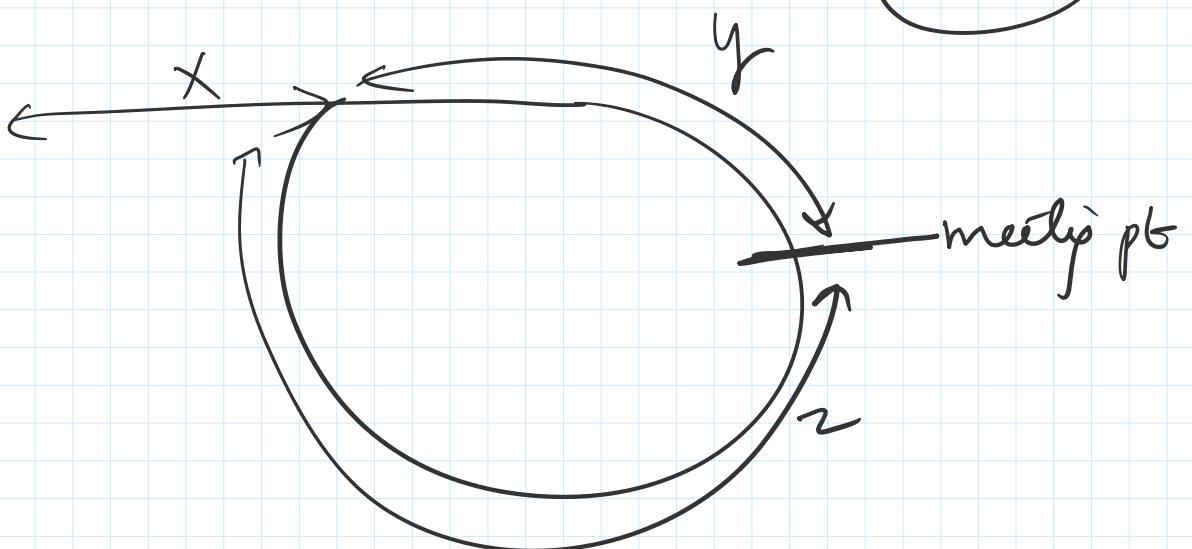
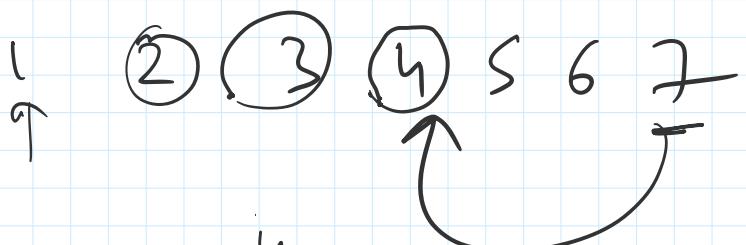
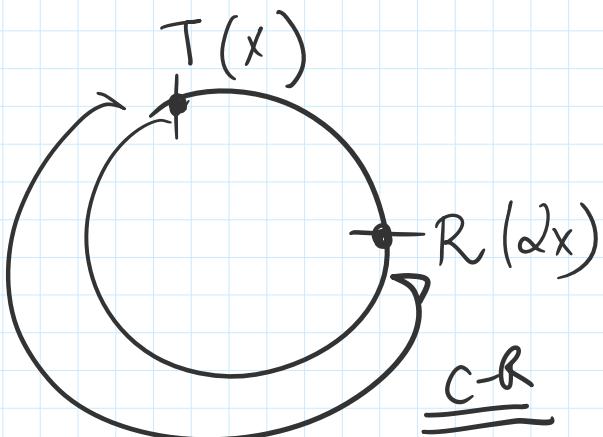
$$S = C-R$$

$$f = 2(C-R) + R = 2C - 2R + R$$

$$= 2C - R$$

$$= \underline{\underline{C}} + (C-R)$$

$$= C-R$$



$$ds = x + y$$

$$df = x + y + z + y = x + (y+z) \cdot k + y$$

$$ts = tf$$

$$ds \quad ts$$

$$m - c$$

$$\frac{ds}{s_s} = \frac{df}{s_f}$$

$$\frac{m}{m/s} = s$$

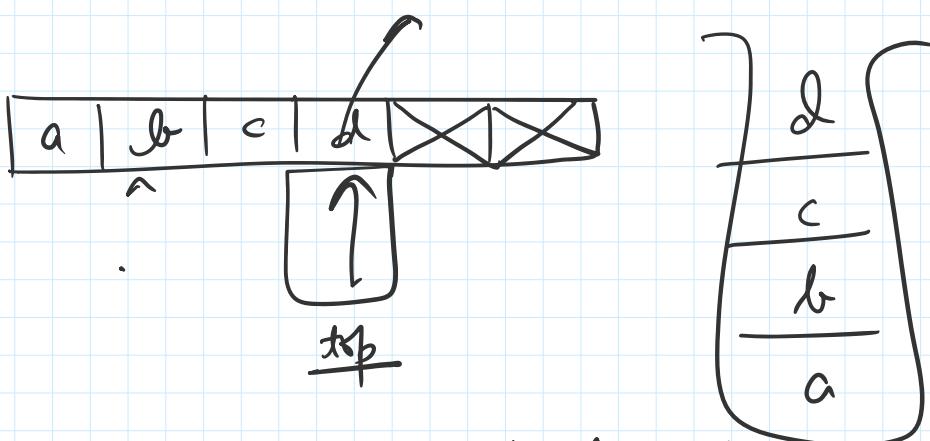
$$\frac{x+y}{1} = \frac{x + k(y+z) + y}{2}$$

$$\cancel{\frac{1}{2}(x+y)} = \cancel{x+y} + (y+z)k$$

$$x+y = (k-1)(y+z) + (y+z)$$

$$x = z + \cancel{(k-1)(y+z)}$$

All data structures \rightarrow stacks/queues



Stack S;
 insert push
 deletion pop
 read top

