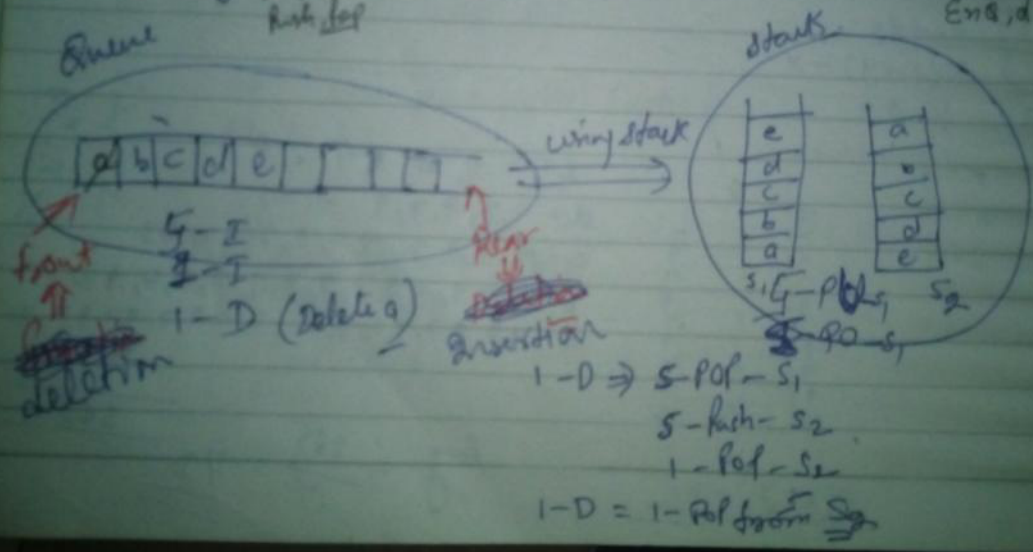


$$\begin{aligned}
 &= \frac{y + (x+y)(n-1)}{n} \\
 &= \frac{y + xn + yn - x - y}{n} \\
 &= \frac{n(x+y) - x}{n}
 \end{aligned}$$

[Que:] Write a C program to implement ~~stack~~ Queue using stack. Queue
 using stack. Push Pop Enq, deq



```

→ Enqueue( $S_1, x$ )  $\Rightarrow O(1)$ 
    {
        push( $S_1, x$ );
    }

→ Dequeue( $S_1, S_2$ )  $\Rightarrow O(1) [BC, AC]$ 
    {
        if ( $S_2$  is not empty)
            y = pop( $S_2$ );
        else
            {
                while ( $S_1$  is not empty)
                {
                    x = pop( $S_1$ );
                    push( $S_2, x$ );
                }
                y = pop( $S_2$ );
            }
        return (y);
    }

```

10 - I \rightarrow 20 - PUSH operation

6 - D \rightarrow 16 - POP operations

using above Algo.

S-F \rightarrow 5 - PUSH

Implement Queue using 1 stack

$En(x)$

{

Insert 'x' in stack.

}

$De()$

{

if (stack is not empty)

{

$x = \text{stk.pop}();$

result = De ;

stk.push(x);

~~return~~ }

return result

}