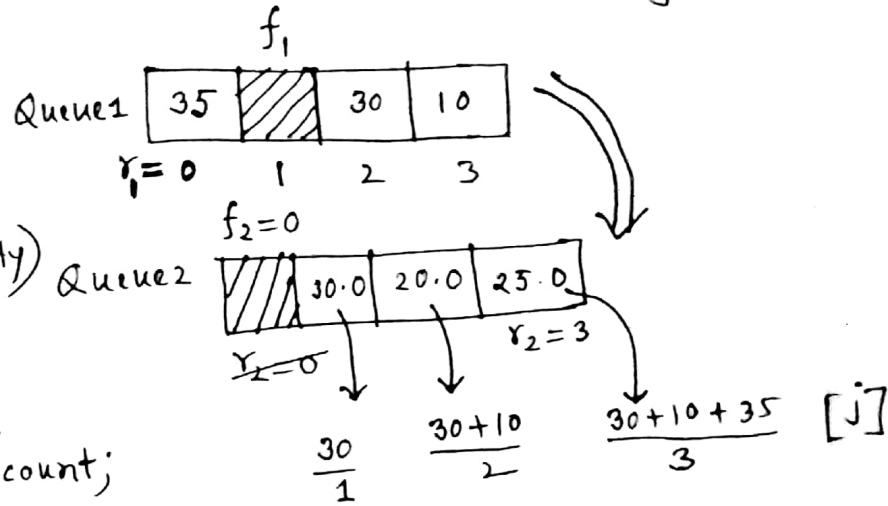


cumulative Moving Average calculation

```

sum = 0; count = 1;
while (Queue1 != empty)
{
    x ← Queue1;
    sum = sum + x;
    Queue2 ← sum / count;
    count = count + 1;
}
    
```



Mechanism:

<u>Queue1 != empty</u>	<u>count = 1</u>	<u>x ← Queue1</u>
True		x = 30

$$\begin{aligned} \text{sum} &= \text{sum} + x \\ \text{sum} &= 0 + 30 \\ &= 30 \end{aligned}$$

Queue2 ← sum / count

Queue2	count
(index 0) 30.0 (index 1) (index 2) (index 3)	2
$f_2=0$ $r_2=1$	

True x = 10

$$\begin{aligned} \text{sum} &= 30 + 10 \\ &= 40 \end{aligned}$$

Queue2

(index 0) 30.0 (index 1) 20.0 (index 2) (index 3)	3
$f_2=0$ $r_2=2$	

True x = 35

$$\begin{aligned} \text{sum} &= 40 + 35 \\ &= 75 \end{aligned}$$

Queue2

(index 0) 30.0 (index 1) 20.0 (index 2) 25.0 (index 3)	4
$f_2=0$ $r_2=3$	