

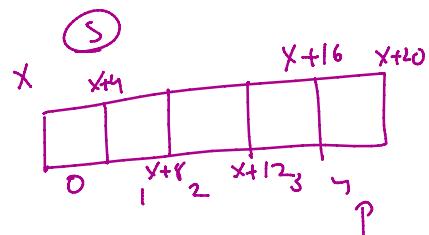
✓ $\text{int}[j] \text{ arr} \geq \text{new int}[5]$;

$X[2]$

$X+8 \rightarrow X+12$

$X[4]$

$X+16 \rightarrow X+20$



0 $\rightarrow X+0 \rightarrow X+4$

1 $\rightarrow X+4 \rightarrow X+8$

2 $\rightarrow X+8 \rightarrow X+12$

3 $\rightarrow X+12 \rightarrow X+16$

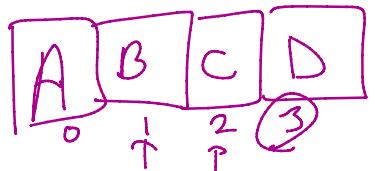
4 $\rightarrow X+16 \rightarrow X+20$

$\{ 2, 4, 6, 8, 10, 12, 14 \}$

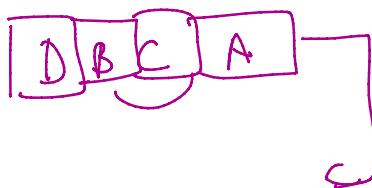
~~10K~~ { 10, 20, 30, 40, 50 }

↳ Rev

~~10K~~ { 50, 40, 30, 20, 10 }



\rightarrow

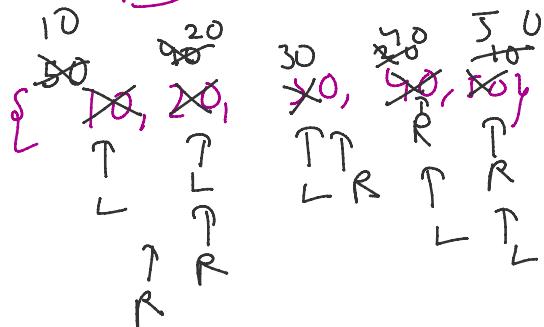


```
public static void Rev(int[] arr) {
    int R = arr.length - 1;
    int L = 0;
    while (L < arr.length) {
        int temp = arr[L];
        arr[L] = arr[R];
        arr[R] = temp;
        L++;
        R--;
    }
}
```

Rotate
on
array

{ 10, 20, 30, 40, 50 }

$\text{rot} = 1$ { 50, 10, 20, 30, 40 }



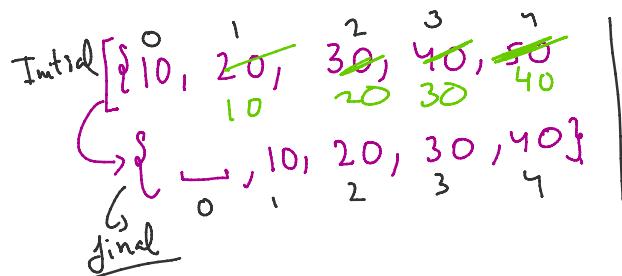
(-13) \rightarrow (-3)

$\text{rot} = 1$ { 20, 30, 40, 50, 10 }

array

- $r_{dt=1} \{ 50, 10, 20, 30, 40 \}$
- $r_{dt=2} \{ 40, 50, 10, 20, 30 \}$
- $r_{dt=3} \{ 30, 40, 50, 10, 20 \}$
- $r_{dt=4} \{ 20, 30, 40, 50, 10 \}$
- $r_{dt=5} \{ 10, 20, 30, 40, 50 \}$

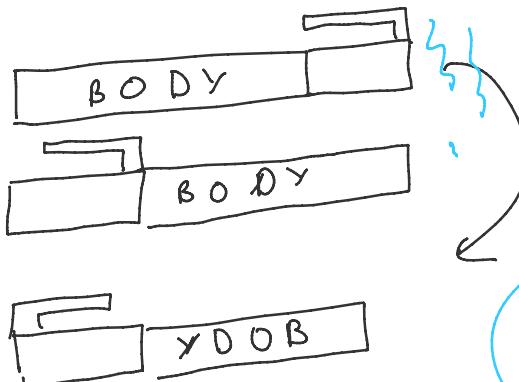
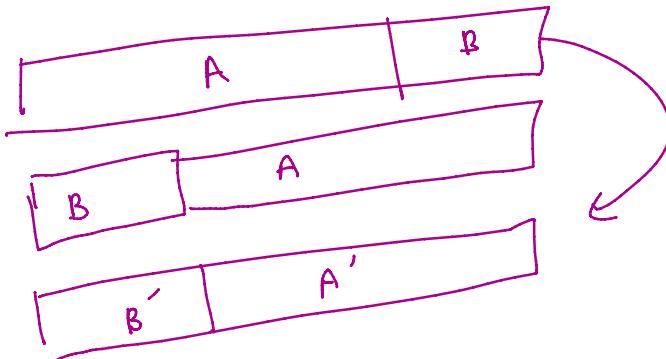
- $r_{dt=1} \{ 20, 30, 40, 50, 10 \}$
- $r_{dt=2} \{ 30, 40, 50, 10, 20 \}$
- $r_{dt=3} \{ 40, 50, 10, 20, 30 \}$
- $r_{dt=4} \{ 50, 10, 20, 30, 40 \}$
- $r_{dt=5} \{ 10, 20, 30, 40, 50 \}$



$$\begin{aligned} arr[1] &= arr[0] \\ arr[2] &= arr[1] \\ arr[3] &= arr[2] \\ arr[4] &= arr[3] \end{aligned}$$

1 to dt | 0 to $dt-1$

$$arr[L] = arr[L-1]$$



$$\begin{aligned} &\{ 10, 20, 30, 40, 50 \} \\ &\{ 10, 50 \} \quad \{ 10, 20, 30 \} \\ &\{ 50, 40 \} \quad \{ 30, 20, 10 \} \end{aligned}$$

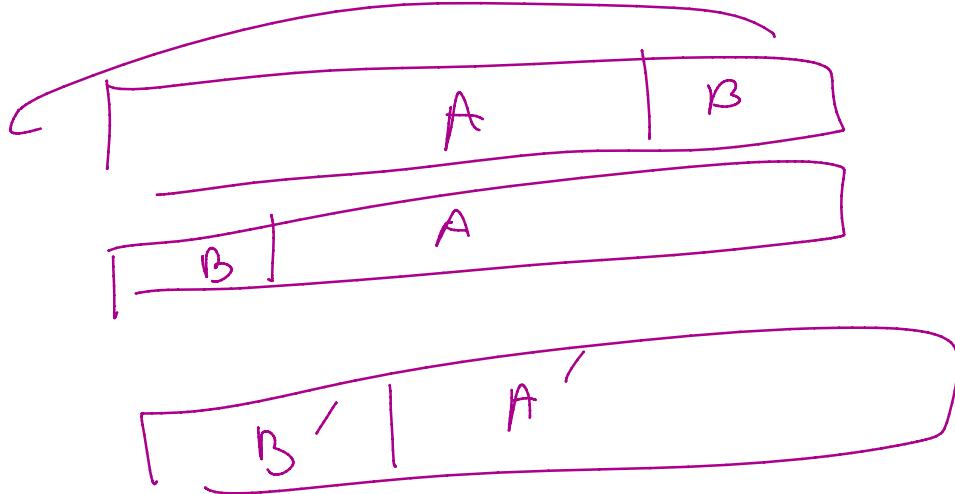
$$\begin{matrix} O, n-1 \\ O, r_{dt} \\ r_{dt}, n-1 \end{matrix}$$

$$\frac{-17}{\text{dividend}} = -\left(\frac{5 \times 3}{Q} + 2\right)$$

$$-17 = 5 \times (-3) - 2$$

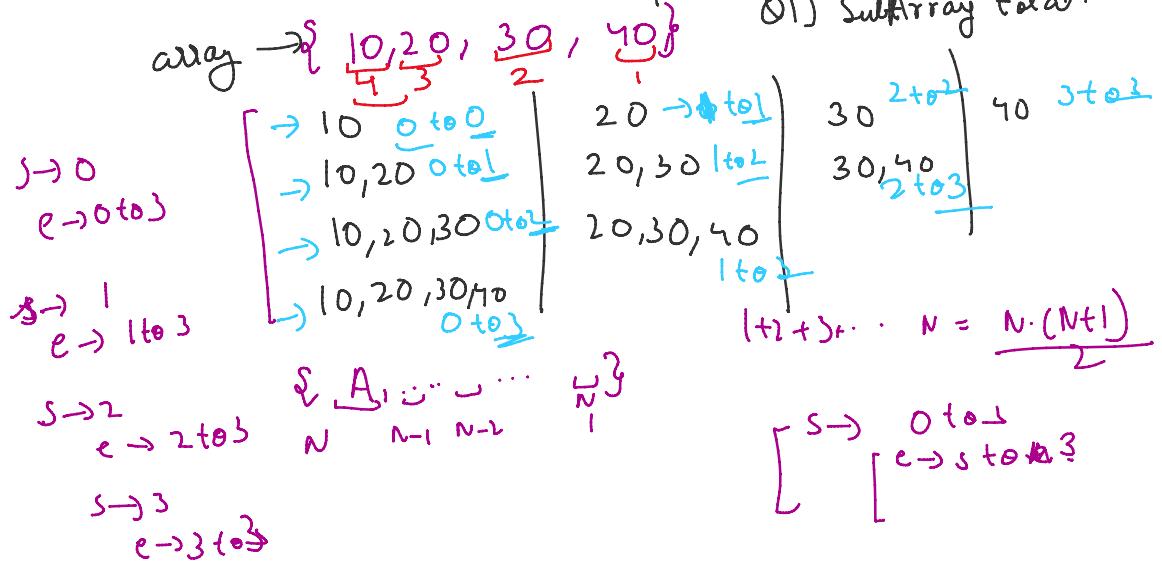
divisor | dividend

R



Sub Array Subsets, contiguous, seq.

Q1) SubArray total.

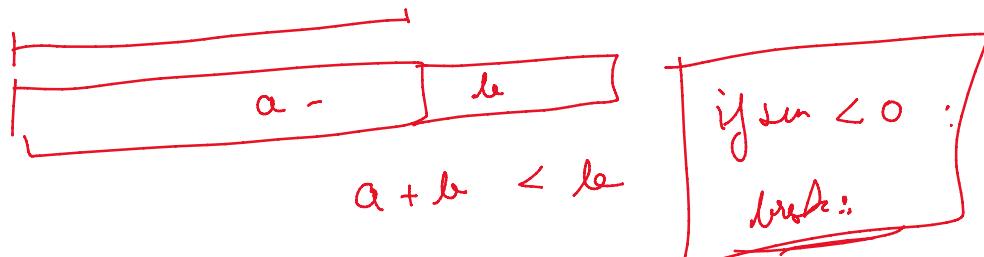


$$\{ -\infty, 1, 2, 5, 4, -\infty \}$$

$$\{ 2, 5, -1, 6, -100 \} \rightarrow \{ 40, 2, 25 \}$$

~~(-988)~~

$$\begin{array}{r} 99 \\ 100 \\ -12 \\ \hline 988 \end{array}$$



$$a + b < k \quad | \quad \text{break!}$$

$\{ \underline{2}, \underline{5}, -1, \underline{6}, \underline{-100}, 40, -2, 25 \} \quad \begin{array}{l} \text{if } s < 0: \\ s = e + 1; \end{array}$

$2 \Rightarrow 2$
 $2, 5 \Rightarrow 7$
 $2, 5, -1 \Rightarrow 6$
 $2, 5, -1, 6 \Rightarrow 12$
 $2, 5, -1, 6, 1000 \Rightarrow -988$

~~5 $\Rightarrow 5$~~
~~5, 1 $\Rightarrow 4$~~
~~5, -1, 6 $\Rightarrow 10$~~
~~5, -1, 6, -100 $\Rightarrow -990$~~

$-1 \Rightarrow -1$
 $6 \Rightarrow 6$
 $6, -100 \Rightarrow 6$

$\{ \underline{2}, \underline{5}, -1, \underline{6}, \underline{-100}, 1, 2 \}$

~~2 $\Rightarrow 2, 2$~~
~~2, 5 $\Rightarrow 7, 7$~~
~~2, 5, -1, 6, 7~~
~~2, 5, -1, 6 $\Rightarrow 12, 12$~~

$2, 5, -1, 6 \Rightarrow 12, 12$
 $\underline{\quad} \Rightarrow x, 12$

$\{ \underline{2}, \underline{5}, -8, \underline{40}, \underline{2}, \underline{-41}, \underline{70}, \underline{5}, \underline{-6}, \underline{-50}, \underline{1}, \underline{2}, \underline{\infty} \}$

| | |
|----------|----------|
| $2, 2$ | $70, 76$ |
| $7, 7$ | $20, 76$ |
| $-1, 7$ | $21, 76$ |
| $40, 40$ | $23, 76$ |
| $42, 42$ | $-6, 76$ |
| $1, 42$ | |
| $71, 71$ | |
| $76, 76$ | |