Revision :-

- Sorting , lambda function
- arrays , subarray , (Kadane's algo)
  - max sum subarray
  - prod. except itself
- 2 pointers
- Prefix array
- Arrays as hashmap
- 2d array
- String & substring
- Binary Search (BSLB & BSUB)
- ArrayList
- Stacks
- Hashmap
- Queue
- PQ

→ **Sorting**

↳ Arrays.sort(arr);

↳ Arrays.sort(arr, Collections.reverseOrder());

→ **Lambda function**

↳
```
Arrays.sort((a, b) -> {
        return a-b;   // ascending
        return b-a;   // descending
});
```

Form the largest number

3	98	76	4

0	1	2	3
900	90	9	999

$\underline{999}\ \underline{9}\ \underline{90}\ \underline{900}$

String num1 = $\underline{9}\,\underline{90}$

String num2 = $\underline{90}\,\underline{9}$

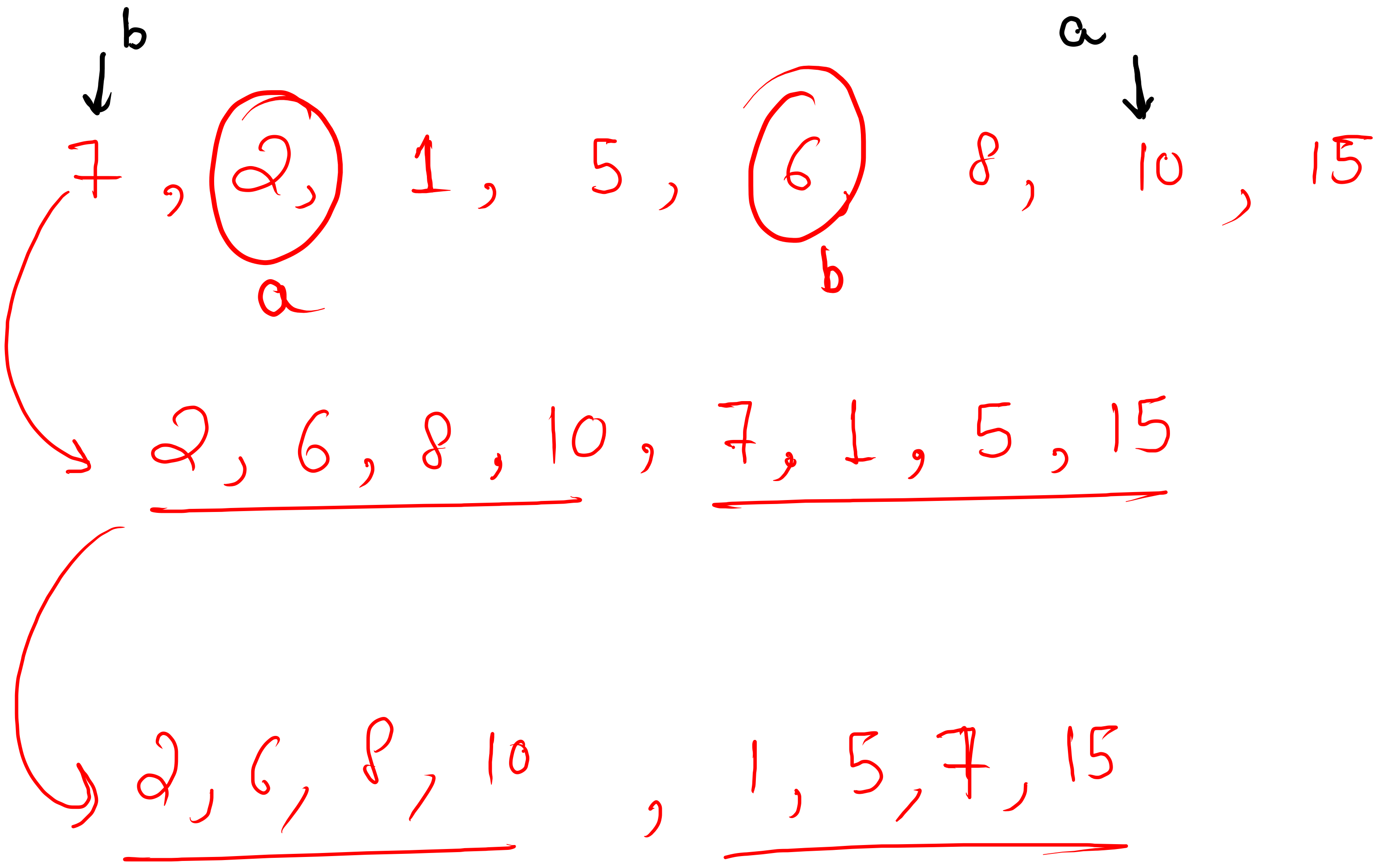
arr

a	b
90	9

num1 = a+b = 909 ←

num2 = b+a = 990

Sort Array By Parity



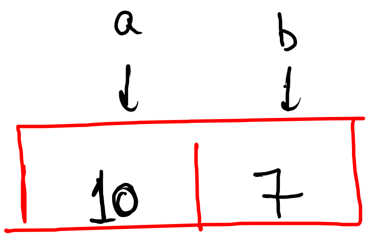
a, b → even
a, b → odd
a → even, b → odd and vice versa

Arrays.sort((a, b) -> {

$\boxed{a-b}$

a → even, b → odd	return -1;
a → odd, b → even	return +1;
a → even, b → even	return a-b;
a → odd, b → odd	return a-b;

});



$\underline{10}$, $\underline{7}$

Rotate Right

arr

1	2	3	4	5	6	7

$k = 3$ clockwise

$k = -3$ anti clockwise

Step1 arr

1	2	3	4	7	6	5

$(n-k, n-1)$

reverse last k elements

Step2 arr

4	3	2	1	7	6	5

$(0, n-k-1)$

reverse remaining

Step3 arr

5	6	7	1	2	3	4

$(0, n-1)$

reverse full

$\boxed{k = n + k}$

$= 7 + (-3)$

$= \textcircled{4}$

1 2 3 4 5 6 7

	clockwise	anticlockwise
1)	$\boxed{7\,1\,2\,3\,4\,5\,6}$	2 3 4 5 6 7 1
2)	$\boxed{6\,7\,1\,2\,3\,4\,5}$	3 4 5 6 7 1 2
3)	$\boxed{5\,6\,7\,1\,2\,3\,4}$	4 5 6 7 1 2 3
4)	$\boxed{4\,5\,6\,7\,1\,2\,3}$	5 6 7 1 2 3 4
5)	$\boxed{3\,4\,5\,6\,7\,1\,2}$	$\boxed{6\,7\,1\,2\,3\,4\,5}$
6)	$\boxed{2\,3\,4\,5\,6\,7\,1}$	$\boxed{7\,1\,2\,3\,4\,5\,6}$
7)	1 2 3 4 5 6 7	1 2 3 4 5 6 7

$n = 7$

clockwise		antic
1	$\rightarrow$	6
2	$\rightarrow$	5
$\textcircled{3}$	$\rightarrow$	$\textcircled{4}$
4	$\rightarrow$	3
$\textcircled{5}$	$\rightarrow$	$\textcircled{2}$
6	$\rightarrow$	1

$k = -4$

$= n - 4$

$= 7 - 4 = \textcircled{3}$

$k = 10000$

$\textcircled{7}$

$k = k \% n$

$= 10000 \% 7$

$=$