

Ascending Sort

```
Array.sort( function(a, b) { return a - b } )  
Array.sort( (a, b) => a - b )
```

Descending Sort

```
Array.sort( function(a, b) { return b - a } )  
Array.sort( (a, b) => b - a )
```

Algorithm:

```
If (a - b > 0 || b - a > 0)  
then positions will be swapped:  
    b, a  
Else positions remain the same:  
    a, b
```

```
TES2U-JYH $ node  
> var arr = [5, 3, 8, 13, 20, 4]  
> console.log(arr.sort((a, b) => a - b))  
[ 3, 4, 5, 8, 13, 20 ]  
> console.log(arr.sort((a, b) => b - a))  
[ 20, 13, 8, 5, 4, 3 ]
```

Ascending sort: array of numbers: 5, 3, 8, 13, 20, 4

Round 1

a = 5, b = 3	a - b > 0	3, 5, 8, 13, 20, 4
a = 5, b = 8	a - b < 0	3, 5, 8, 13, 20, 4
a = 8, b = 13	a - b < 0	3, 5, 8, 13, 20, 4
a = 13, b = 20	a - b < 0	3, 5, 8, 13, 20, 4
a = 20, b = 4	a - b > 0	3, 5, 8, 13, 4, 20

Round 2

a = 3, b = 5	a - b > 0	3, 5, 8, 13, 4, 20
a = 5, b = 8	a - b < 0	3, 5, 8, 13, 4, 20
a = 8, b = 13	a - b < 0	3, 5, 8, 13, 4, 20
a = 13, b = 4	a - b > 0	3, 5, 8, 4, 13, 20
a = 4, b = 20	a - b < 0	3, 5, 8, 4, 13, 20

⋮

Round 4

3, 4, 5, 8, 13, 20