

Insertion

[7, 2, 1, 5, 6]

↓

[7, 2, 1, 5, 6]

[2, 7, 1, 5, 6]

[2, 1, 7, 5, 6]

[1, 2, 7, 5, 6]

↑

[1, 2, 5, 7, 6]

↑ [1, 2, 5, 6, 7]

4b(2 < 7)

swap

1b(7 < 2)

x

1b(1 < 7)

swap

1b(1 < 2)

swap

1b(5 < 7)

1b(6 < 7)

swap

0 1 2 3 4
[7 2 1 6 3]

↓

^{j i}
[2, 7, 1, 6, 3]

^{j i}
[2, 1, 7, 6, 3]

^{j i}
[1, 2, 7, 6, 3]

^{j i}
[1, 2, 6, 7, 3]

^{j i}
[1, 2, 6, 3, 7]

[1, 2, 3, 6, 7]

for (i = 1; i < arr.length; i++) {

let j = i - 1

let current = arr[i] = 1

while (j >= 0 && current < arr[j]) {

arr[j+1] = arr[j]

arr[j] = current

j--

}