Eg: [1, 2, 5, 3, 2]

	0	1	2	3	4
LIS:	1	2	5	3	2

	0	1	2	3	4
dp =	1	2	3	3	2

Reverse Num: [2 3 5 2 1]

	0	1	2	3	4
reverse LIS =	1	2	3	2	1

Bitonic: [1 2 5 3 2]

dp:	1	2	3	3	2

0 3 5 2 1 → 1 2 5 3 2

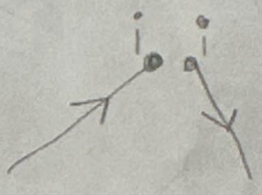
reverse (reverse LIS):	1	2	3	2	1

+

1	3	5	4	2

dp + reverse − 1

−1 because, we are adding element at i index twice



Now If we dont consider strictly increasing & strictly decreasing as Bitonic, then we can skip part where LIS is 1, that means there was no subsequence

[1 2 5 3 2]

dp

1	2	3	3	2

rev dp

1	2	3	2	1

[0, 3, 5, 4, 0]

Example 2:

Num: [1, 5, 7]

dp =

1	2	3

reverse Num: 7, 5, 1

reverse dp =

1	1	1

↓

reverse this = 1, 5, 7

1	1	1

Bitonic = 1 5 7

since the Number is strictly increasing We skip part with 1.

dp

1	2	3

reverse dp

1	1	1

---

0 0 0
