

1	3	5	4	7	6
---	---	---	---	---	---

dp =	1	1	1	1	1	1
------	---	---	---	---	---	---

Count =	1	1	1	1	1	1
---------	---	---	---	---	---	---

* Cur Num = 1

dp = 1 Count = 1 sub = 1

* Cur Num = 3 , $3 > 1$, subseq = [1, 3]

dp =	1	2	1	1	1	1
------	---	---	---	---	---	---

↳ length = 2

Count = 1

Count =	1	1	1	1	1	1
---------	---	---	---	---	---	---

* Cur Num = 5 , $5 > 1, 5, 3$

subseq = [1, 3, 5]

Length = 3

Count = 1

dp =	1	2	3	1	1	1
------	---	---	---	---	---	---

Count =	1	1	1	1	1	1
---------	---	---	---	---	---	---

* Cur Num = 4 , $4 > 1, 4 > 3$

subseq = [1, 3, 4]

Length = 3

Count = 1

dp =	1	2	3	3	1	1
------	---	---	---	---	---	---

Count =	1	1	1	1	1	1
---------	---	---	---	---	---	---

* Cur Num = 7 , $7 > [1 \ 3 \ 5 \ 4]$

Sub = $[1, 3, 5, 7]$ } & subseq can be formed
 $[1, 3, 4, 7]$

Length = 4 \rightarrow This is the max len

Count = 2 \rightarrow There are two & subseq we have

dp =	1	3	5	4	7	6
	1	2	3	3	4	1

Count =	1	3	5	4	7	6
	1	1	1	1	2	1

* Cur Num = 6 , $6 > [1 \ 3 \ 5 \ 4]$

Sub = $[1 \ 3 \ 5 \ 6]$

$[1 \ 3 \ 4 \ 6]$

Length = 4

Count = 2

dp =	1	3	5	4	7	6
	1	2	3	3	4	4

Count =	1	1	1	1	2	2
	1	1	1	1	2	2

\rightarrow So we have 2 as max count, There are 2 instances with count as 2 ie $2+2=4$ subsequences with max len

$[1 \ 3 \ 5 \ 7]$
 $[1 \ 3 \ 4 \ 7]$
 $[1 \ 3 \ 5 \ 6]$
 $[1 \ 3 \ 4 \ 6]$

Eq: [2 2 2 2 2]

dp = [1 | 1 | 1 | 2 | 1]

Count = [1 | 1 | 1 | 1 | 1]

So, we have a subseq with count=1, there are 5 of the

[2] } These are the 5 LIS
[2]
[2]
[2]
[2]