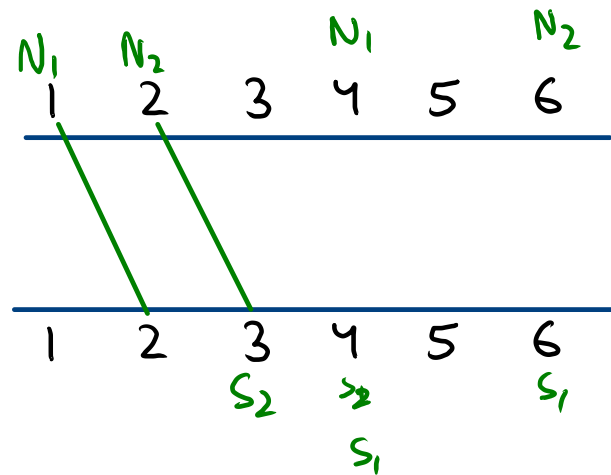
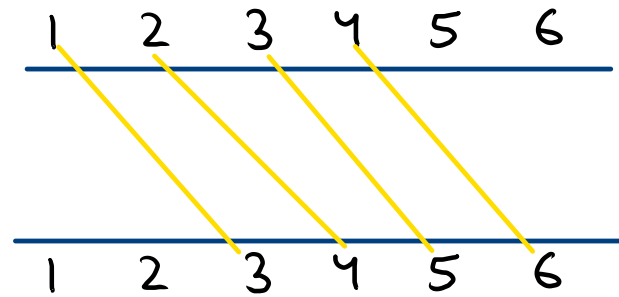


n 6  
 north 2 4 5 6 3 1  
 south 4 6 1 2 5 3



$N_1 < N_2$   
 $S_1 < S_2$

$N_1 < N_2$   
 $S_1 > S_2$

- 1) Sort on the basis north bank
- 2) Apply LIS only on south

n 6  
 north 2 4 5 6 3 1  
 south 4 6 1 2 5 3

$\Rightarrow$

1	2	3	4	5	6
3	4	5	6	1	2

sort  
 $N_1 < N_2$  ✓  
 $S_1 < S_2$   
 LIS

