Merge sort with two way merging. Here two adjacent sorted lists are merged to form a larger sorted list.

Input	At the ned of iteration 1 (list size 2)	At the ned of iteration 2 (list size 4)	At the ned of iteration 3 (list size 8)	At the ned of iteration 3 (list size 16)
700	100	20	20	5
100	700	90	90	15
90	20	100	100	20
20	90	700	130	90
130	130	130	290	100
290	290	290	410	130
3000	410	410	700	290
410	3000	3000	3000	410
5	5	5	5	700
15	15	15	15	3000

Merge sort with three way merging. Here three adjacent sorted lists are merged to form a larger sorted list.

Input	At the ned of iteration 1 (list size 3)	At the ned of iteration 2 (list size 9)	At the ned of iteration 3 (list size 27)	
700	90	5	5	
100	100	20	15	
90	700	90	20	
20	20	100	90	
130	130	130	100	
290	290	290	130	
3000	5	410	290	
410	410	700	410	
5	3000	3000	700	
15	15	15	3000	