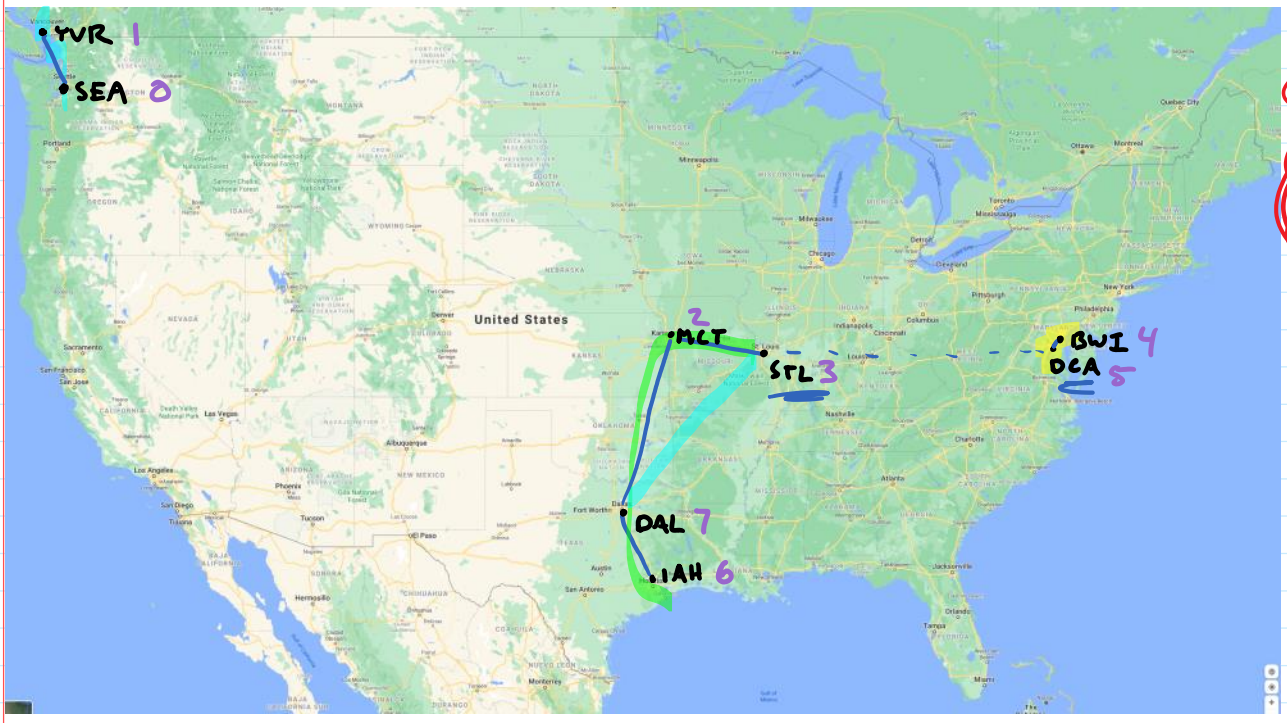
Greedy TSP



connected components

0 1
2 3 6 7
4 5

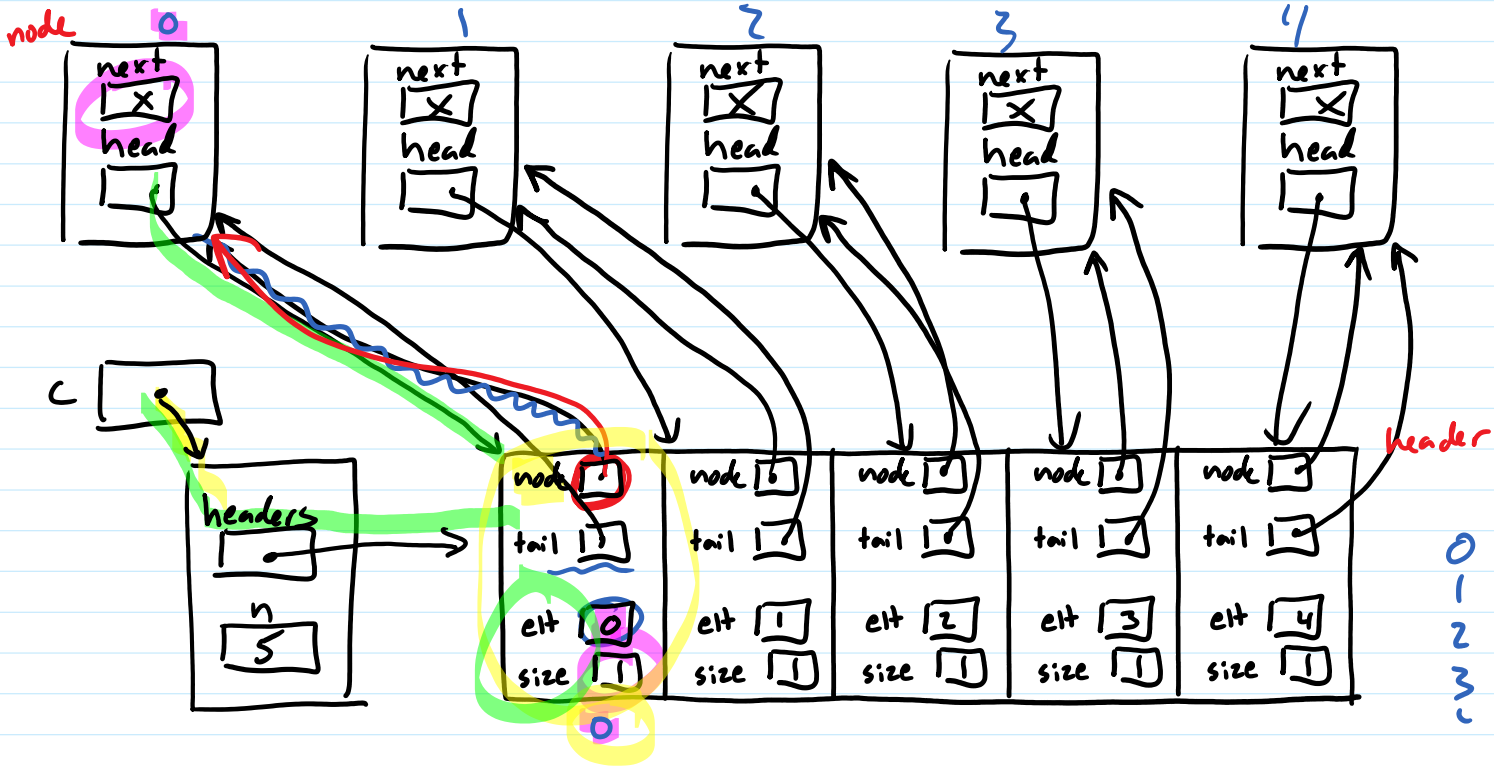
union / find (disjoint set)

tour segments

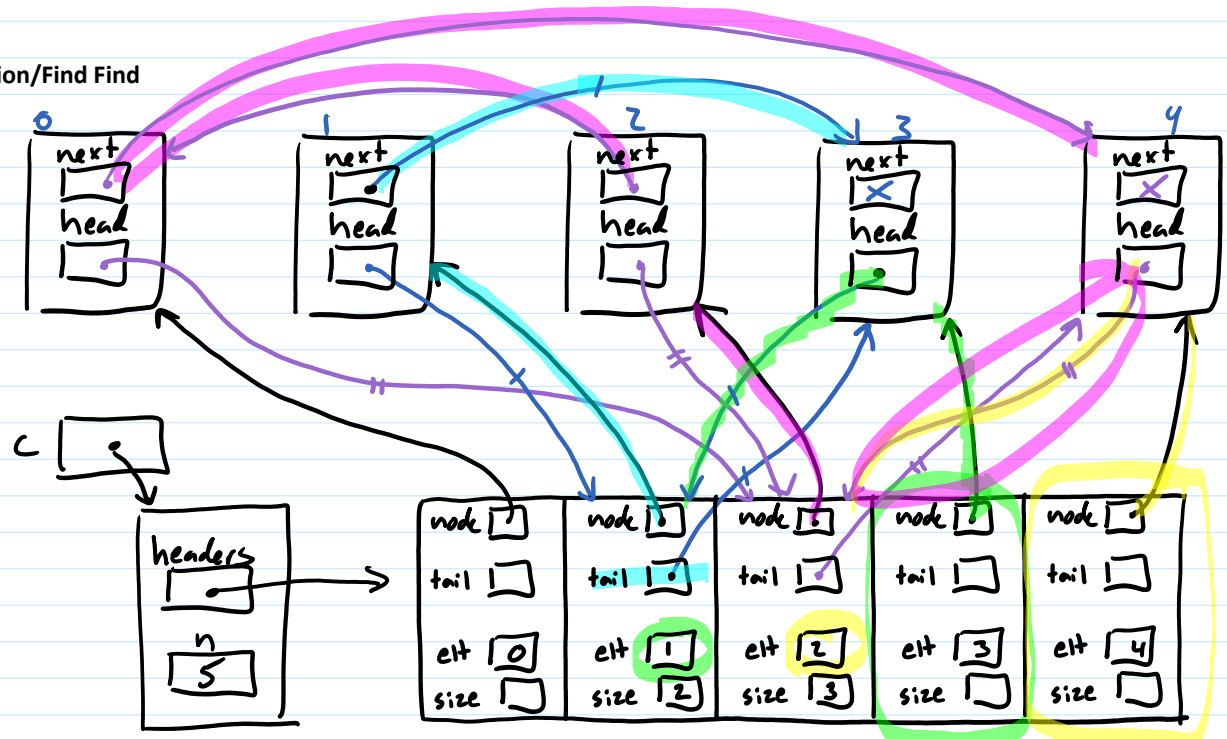
4 5
0 1
6 7
2 3
2 7
3 5
0 6

	0	1	2	3	4	5	6	7
count	1	1	2	1	1	1	1	2

Union/Find Create

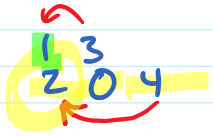


Union/Find Find

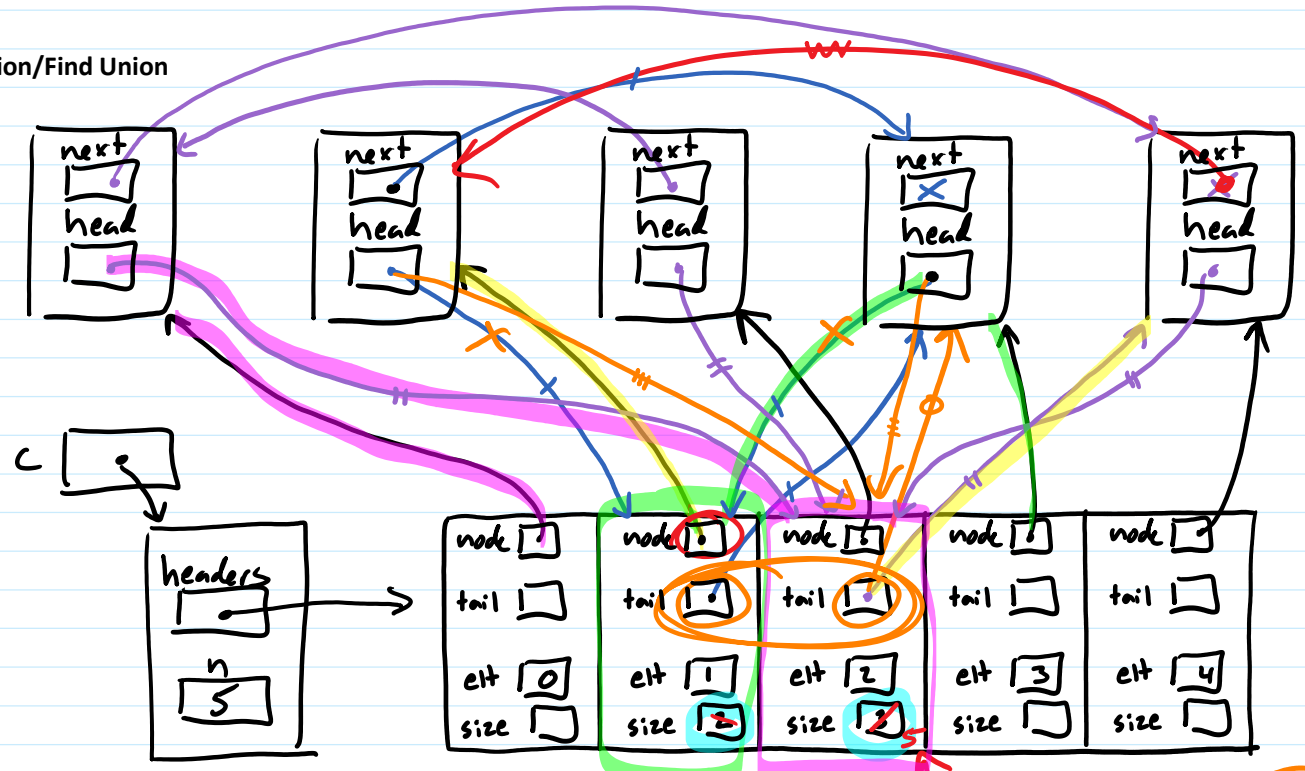


after union(1,3) union(2,0) union(4,0)

find(3) find(4)



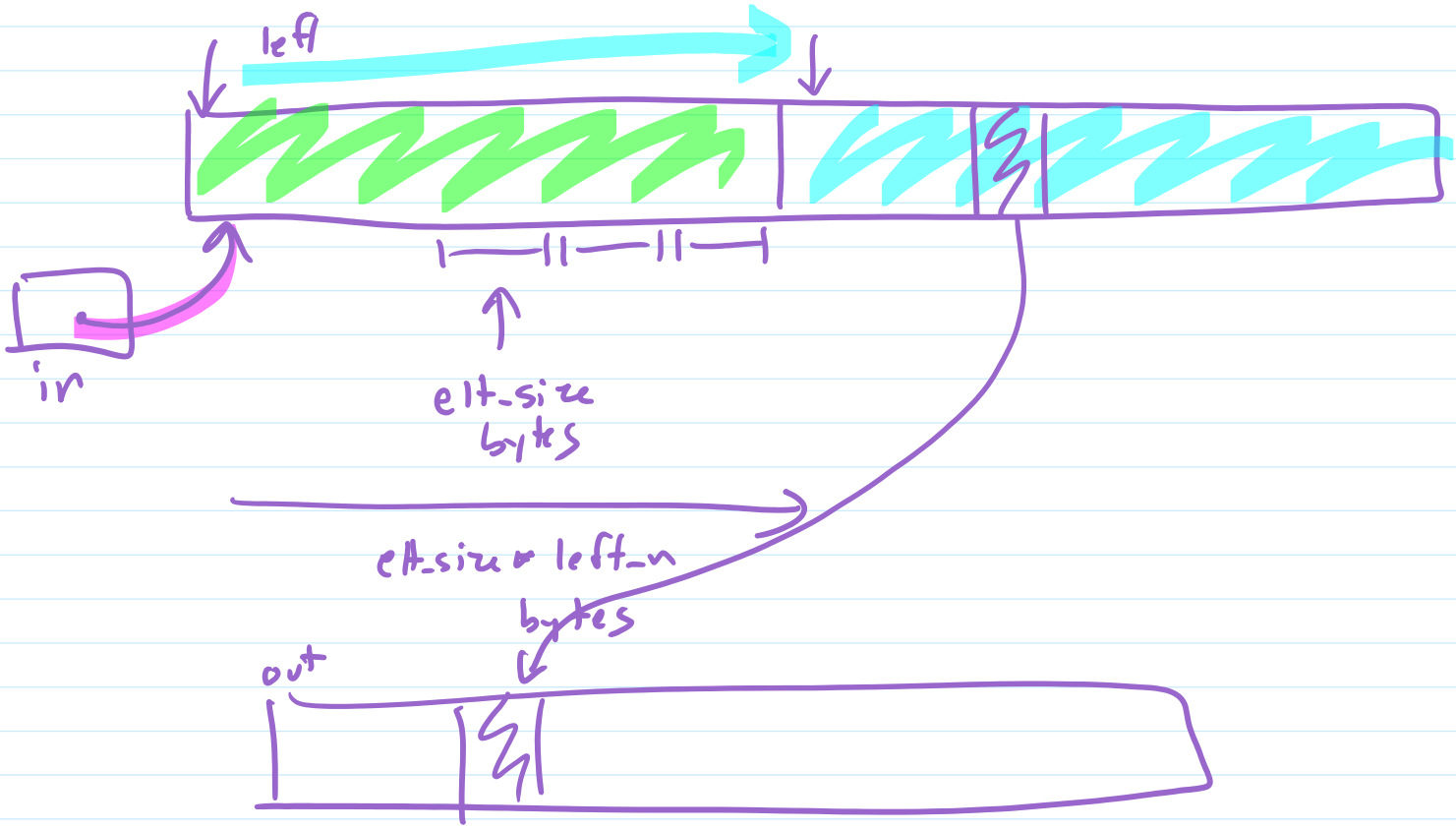
Union/Find Union



union (3, 0)

1) go to heads
2) swap so i's list ≥ j's list
3) update i's size
4) i's old tail points to j's head
5) i's new tail is j's tail
6) all nodes on j's list have head point to i

1 3
2 0 4


left
in
elt_size bytes
elt_size * left_n bytes
out