

DAA Lab Question

1. Implement insertion sort for linked list.
Ex: Linked list before sorting: $30 \rightarrow 3 \rightarrow 4 \rightarrow 20 \rightarrow 5$,
Linked list after sorting: $3 \rightarrow 4 \rightarrow 5 \rightarrow 20 \rightarrow 30$
2. Implement merge sort for linked list.
Ex: Linked list before sorting: $10 \rightarrow 20 \rightarrow 15 \rightarrow 2 \rightarrow 5 \rightarrow 3$,
Linked list after sorting: $2 \rightarrow 3 \rightarrow 5 \rightarrow 10 \rightarrow 15 \rightarrow 20$
3. Implement quick sort using first element as pivot.
Ex. Input: 10 5 7 9 15 3
Output: 3,5,7,9,10,15
4. Implement quick sort using middle element as pivot.
Ex. Input: 40 20 60 10 50 30 (use 60 as pivot)
Output: 10 20 30 40 50 60