1. Write Algorithm/Pseudocode for following operations on a Singly Linked Lists
2. Inserting a new node in a Linked List at the beginning

Step 1: IF AVAIL = NULL Write OVERFLOW Go to Step 7 [END OF IF]

Step 2: SET NEW\_NODE = AVAIL

Step 3: SET AVAIL = AVAIL NEXT

Step 4: SET DATA = VAL

Step 5: SET NEW\_NODE NEXT = START

Step 6: SET START = NEW\_NODE

Step 7: EXIT

1. Inserting a new node in a Linked List at the end.

Step 1: IF AVAIL = NULL Write OVERFLOW Go to Step 1 [END OF IF]

Step 2: SET = AVAIL

Step 3: SET AVAIL = AVAIL NEXT

Step 4: SET DATA = VAL

Step 5: SET NEW\_NODE = NULL

Step 6: SET PTR = START

Step 7: Repeat Step 8 while PTR NEXT != NULL

Step 8: SET PTR = PTR NEXT [END OF LOOP]

Step 9: SET PTR NEXT = Step 10: EXIT NEW\_NODE NEW\_NODE NEXT NEW\_NODE - > - > - > - > - > - >

1. Inserting a new node in a Linked List after a given node.

Step 1: IF AVAIL = NULL Write OVERFLOW Go to Step 12 [END OF IF]

Step 2: SET = AVAIL

Step 3: SET AVAIL = AVAIL NEXT

Step 4: SET DATA = VAL

Step 5: SET PTR = START

Step 6: SET PREPTR = PTR

Step 7: Repeat Steps 8 and 9 while != NUM

Step 8: SET PREPTR = PTR

Step 9: SET PTR = PTR NEXT [END OF LOOP] Step 1 : PREPTR NEXT = Step 11: SET NEW

1. Inserting a new node in a Linked List before a given node

Step 1: IF AVAIL = NULL Write OVERFLOW Go to Step 12 [END OF IF]

Step 2: SET = AVAIL

Step 3: SET AVAIL = AVAIL NEXT

Step 4: SET DATA = VAL

Step 5: SET PTR = START

Step 6: SET PREPTR = PTR

Step 7: Repeat Steps 8 and 9 while PTR DATA != NUM

Step 8: SET PREPTR = PTR

Step 9: SET PTR = PTR NEXT [END OF LOOP]

Step 10 : PREPTR NEXT = Step 11: SET NEXT = PTR Step 12: EXIT NEW\_NODE NEW\_NODE NEW\_NODE NEW\_NODE - > - > - > - > - > -