***Question 1***

Write a function “insert\_any()” for inserting a node at any given position of the linked list. Assume

position starts at 0.

***Question 2***

Write a function “delete\_beg()” for deleting a node from the beginning of the linked list.

***Question 3***

Write a function “delete\_end()” for deleting a node from the end of the linked list.

1)

insertNodeAtPosition(Node \*head, int data, int position)

{

int i = 0;

Node \*prev;

Node \*pcurr;

Node \*pnew;

pnew = malloc(sizeof(Node));

pnew->data = data;

prev = NULL;

for (pcurr = head; pcurr != NULL; pcurr = pcurr->next, i += 1) {

if (i >= position)

break;

prev = pcurr;

}

pnew->next = pcurr;

if (prev != NULL)

prev->next = pnew;

else

head = pnew;

return head;

}

2)

1. **void** deleteFromStart() {

4. **if**(head == NULL) {
5. printf("List is empty \n");
6. **return**;
7. }
8. **else** {
10. **if**(head != tail) {
11. head = head->next;
12. }
14. **else** {
15. head = tail = NULL;
16. }
17. }
18. }

3)

1. **void** deleteFromEnd() {

4. **if**(head == NULL) {
5. printf("List is empty \n");
6. **return**;
7. }
8. **else** {
10. **if**(head != tail ) {
11. **struct** node \*current = head;
13. **while**(current->next != tail) {
14. current = current->next;
15. }
17. tail = current;
18. tail->next = NULL;
19. }
21. **else** {
22. head = tail = NULL;
23. }
24. }
25. }