DAY 3

Question 1

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

position starts at 0.

node \*insert\_any(node \*head, int val, int pos)

{

int i;

node \*new = create(val);

node \*temp = head;

//if position 1 then insert at beginning

if(pos==1)

{

new->next=temp;

head=new;

return head;

}

for(i=0;i<pos-2;i++)

{

temp=temp->next;

if(temp==NULL) // to check for the current position is valid or not

{

printf("\nPosition out of bound");

return head;

}

}

new->next=temp->next;

temp->next=new;

printf("\n node inserted");

return head;

}

Question 2

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

node \*delete\_beg(node \*head)

{

if(head == NULL)

{

printf("\nEmpty List");

}

node \*temp = head;

head = temp->next;

free(temp);

return head;

}

Question 3

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

node \*delete\_end(node \*head)

{

if(head == NULL)

{

printf("\nEmpty List");

}

else if(head->next==NULL)

{

head == NULL;

free(head);

printf("\n Node Deleted, List now empty");

}

else

{

node \*temp = head, \*temp1;

while(temp->next)

{

temp1 = temp;

temp = temp->next;

}

temp1->next=NULL;

free(temp);

printf("\nLast Node deleted");

}

return head;

}