

DSA assignment Day-3

1.)Write a function “insert_any()” for inserting a node at any given position of the linked list. Assume position starts at 0.

Answer:-

```
node *insert_any_pos(node *head,int x,int pos)

{

    int c = 0;

    node *new = create(x);

    if(head == NULL)
    {
        head = new;
        return head;
    }

    node* temp = head;

    if(pos == 0)
    {
        new->next = head;
        head = new;
        return head;
    }

    while(temp->next!=NULL && !(c==pos-1))

    {

        c++;

        temp = temp->next;

    }

    new->next = temp->next;

    temp->next = new;

    return head;

}
```

2.) Write a function “delete_beg()” for deleting a node from the beginning of the linked list.

Answer:-

```
node *delete_beg(node* head)
{
    if(head == NULL)

        return ;

    node *temp = head;

    head = temp->next;

    free(temp);

    return head;
}
```

3.) Write a function “delete_end()” for deleting a node from the end of the linked list.

Answer:-

```
node *delete_end(node *head)
{
    if(head == NULL)
        return ;
    node *temp = head;

    if(temp->next == NULL)
    {
        head =NULL;
        free(temp);
        return head;
    }

    while(temp->next->next)
```

```
        temp=temp->next;

free(temp->next);

temp->next = NULL;

return head;

}
```