**DAY-3 ASSIGNMENT**

**Question 1:** Write a function “insert\_any()” for inserting a node at any given position of the linked list. Assumeposition starts at 0.

int length()

{

int count=0;

struct node\* temp;

temp= root;

while(temp!=NULL)

{

count++;

temp=temp->link;

}

return count;

}

void insert\_any()

{

struct node\* temp, \*p;

int loc, len, i=0;

printf(“Enter location to insert new node: “);

scanf(“%d”, &loc);

len=length();

if(loc>len)

{

printf(“invalid location\n”);

printf(“current list is having %d nodes”, len);

}

else

{

P = root;

while(i< loc-1)

{

p = p->link;

i++;

}

temp= (struct node\*)malloc(sizeof(struct node));

printf(“Enter node data: “);

scanf(“%d”, &temp->data);

temp->link= NULL;

temp->link = p->link;

p->link = temp;

}

}

**Question 2: Write a function “delete\_beg()” for deleting a node from the beginning of the linked list.**

void delete\_beg()

{

struct node\* temp;

int loc=1;

if(loc>length())

printf(“no nodes to delete”);

else

{

temp= root;

root=temp->link;

temp->link=NULL;

free(temp);

}

}

**Question 3:** Write a function “delete\_end()” for deleting a node from the end of the linked list.

void delete\_end()

{

Struct node \*p=root, \*q;

int loc, i=1;

printf(“enter last location to delete: “);

scanf(“%d”, &loc);

if( (loc>length()) || ( loc==1) )

printf(“invalid location”);

else{

while(i<loc)

{

p = p->link;

i++;

}

q = p->link;

p->link = q->link;

q->link= NULL;

free(q);

}

}