**DAY 23**

**CODE:**

#include<stdio.h>

#include<stdlib.h>

struct ListNode

{

int data;

struct ListNode \*next;

};

void insert(struct ListNode \*\*head,int x)

{

struct ListNode \*newnode= malloc(sizeof(struct ListNode));

newnode->data=x;

newnode->next=\*head;

\*head=newnode;

}

void sortList(struct ListNode\*\* head){

struct ListNode \*i=\*head,\*j=NULL,\*temp=\*head;

int t,k=1;

if(\*head==NULL)

{

printf("\nEmpty List");

}

else

{

while(i!=NULL)

{

j=i->next;

while(j!=NULL)

{

if(i->data>j->data)

{

t=i->data;

i->data=j->data;

j->data=t;

}

j=j->next;

}

i=i->next;

}

}

printf("\n\nThe sorted linked list is: ");

while(temp != NULL)

{

printf("%d->", temp->data);

temp = temp->next;

}

printf("NULL\n");

}

void main()

{

struct ListNode \*head=NULL;

int n;

while(1)

{

printf("\nEnter a value to insert (Press -1 to stop): ");

scanf("%d",&n);

if(n==-1)

{

break;

}

else

insert(&head,n);

}

struct ListNode \*temp = head;

printf("\n\nThe linked list is: ");

while(temp != NULL)

{

printf("%d->", temp->data);

temp = temp->next;

}

printf("NULL\n");

sortList(&head);

}

**OUTPUT:**

}