Experiment-10 : Linked List Operations

10.Write a C Program To Implement Linked List Operations.

Code :

#include <stdio.h>

#include <stdlib.h>

struct Node {

int data;

struct Node\* next;

};

void insertAtBeginning(struct Node\*\* head, int newData) {

struct Node\* newNode = (struct Node\*)malloc(sizeof(struct Node));

newNode->data = newData;

newNode->next = \*head;

\*head = newNode;

}

void insertAtEnd(struct Node\*\* head, int newData) {

struct Node\* newNode = (struct Node\*)malloc(sizeof(struct Node));

newNode->data = newData;

newNode->next = NULL;

if (\*head == NULL) {

\*head = newNode;

return;

}

struct Node\* lastNode = \*head;

while (lastNode->next != NULL) {

lastNode = lastNode->next;

}

lastNode->next = newNode;

}

void displayLinkedList(struct Node\* head) {

struct Node\* currentNode = head;

while (currentNode != NULL) {

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

currentNode = currentNode->next;

}

printf("\n");

}

int main() {

struct Node\* head = NULL;

insertAtBeginning(&head, 3);

insertAtBeginning(&head, 2);

insertAtBeginning(&head, 1);

insertAtEnd(&head, 4);

insertAtEnd(&head, 5);

insertAtEnd(&head, 6);

displayLinkedList(head);

return 0;

}

Output :

