PRACTICAL – 6

PROGRAM -1

AIM- Write A C Program For Simple Linked-List

CODE-

```c
#include <stdio.h>
#include <stdlib.h>

struct node
{
   int data;
   struct node *next;
};

struct node *head = NULL;

// Function to insert a new node at the beginning of the linked list
void insert(int data)
{
   struct node *newnode = (struct node *)malloc(sizeof(struct node));
   newnode->data = data;
   newnode->next = head;
   head = newnode;
}

// Function to display the elements of the linked list
void display()
{
   struct node *temp = head;
   while (temp != NULL)
   {
     printf("%d ", temp->data);
     temp = temp->next; // Move to the next node
   }
}

int main()
{
  printf("\n HARSH D \n");
```

```
    int n, data;
    printf("Enter the number of nodes: ");
    scanf("%d", &n);

    for (int i = 0; i < n; i++)
    {
        printf("Enter the data for node %d: ", i + 1);
        scanf("%d", &data);
        insert(data); // Insert data into the linked list
    }

    printf("Linked List elements: ");
    display(); // Display the linked list

    return 0;
}
```

OUTPUT

```
  HARSH D
Enter the number of nodes: 3
Enter the data for node 1: 1
Enter the data for node 2: 2
Enter the data for node 3: 3
Linked List elements: 3 2 1
```