USN :- 1BM L9C5178
Lab :- Test - 2
Date :- 4 / 1 / 2021
Yogesh.T

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

struct node {
   char USN[30];
   char name[30];
   struct node *next;
   struct node *prev;
};
struct node *head = NULL;

void insert_end() {
    struct node *new_node, *temp;
    new_node = (struct node *) malloc (sizeof (struct node));
    printf ("Enter the Usn \n");
    scanf ("%s", new_node -> USN);
    printf ("Enter the name \n");
    scanf ("%s", new_node -> name);
    new_node -> next = NULL;
    new_node -> prev = NULL;
    if (head == NULL) {
        head = new_node;
    }
    else {
    temp = head;
    while (temp ->next != NULL)
        temp = temp ->next;
```

```
        temp->next = new_node;
        new_node->prev = temp;
    }
}

void del() {
    struct node * temp;
    char ele[30];
    if (head == NULL) {
        printf("Empty list \n");
        return;
    }
    printf("Enter the usn to be deleted \n");
    scanf("%s", ele);
    temp = head;
    while (strcmp(temp->usn, ele) != 0) {
        temp = temp->next;
        if (temp == NULL) {
            printf("Element is not in list \n");
            break;
        }
    }
    if (temp == head)
        head = head->next;
    else if (temp->next == NULL) {
        temp = temp->prev;
        temp->next = NULL;
    }
}
```

```c
        else {
            temp->prev->next = temp->next;
            temp->next->prev = temp->prev;
        }
}

void display() {
    struct node *temp;
    temp = head;
    while (temp != NULL) {
        printf("usn : %s \n", temp->usn);
        printf("name : %s\n\n", temp->name);
        printf
        temp = temp->next;
    }
}

int main() {
    int choice;
    while (1) {
        printf("1. Insert USN-NAME\n");
        printf("2. Delete by USN \n");
        printf("3. Display \n");
        printf("4. Exit \n");
        printf("Enter your choice \n");
        scanf("%d", &choice);
        switch (choice) {
            case 1: insert _endl; break;
            case 2: del(); break;
            case 3: display(); break;
            case 4; exit (0);
        }
    }
}
```