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#include<stdio.h>
#include<stdlib.h>
#include<string.h>
struct node{
    int number;
    char name[30];
    int t_mark;
    struct node *link;
};
struct node* header = NULL;
void display();
void add();
void delete();
void search();
int main()
{
    int choice;
    char ch;
    while (1) {
        printf("1.Display\n2.add data\n3.delete\n4.Search");
        scanf("%d", &choice);

        switch (choice) {
            case 1:
                display();
                break;
            case 2:
                add();
                break;
            case 3:
                delete();
                break;
            case 4:
                search();
                break;
            default:
                printf("Incorrect Choice\n");
        }
        printf("\nDo you want to continue y/n ");
        scanf(" %ch",&ch);
        if(ch == 'n'){
            break;
        }
    }
}

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        return 0;
    }
void display(){
    struct node*temp;
    if(header==NULL)
        printf("Empty");
    else{
        temp = header;
        while (temp!=NULL)
        {
            printf("Roll no :%d\t Name : %s\t Total mark: %d\n",temp->number,temp->name,temp->t_mark);
            temp = temp->link;
        }
    }
}

void add(){
    int no,mark;
    char s[30];
    struct node*temp,*ptr;
    temp = malloc(sizeof(struct node));
    printf("Enter the Roll No");
    scanf("%d",&no);
    printf("Enter Name");
    scanf("%s",s);
    printf("Enter Total mark");
    scanf("%d",&mark);
    temp->number=no;
    strcpy(temp->name,s);
    temp->t_mark=mark;
    temp->link=NULL;
    ptr = header;
    if(ptr==NULL){
        header = temp;
    }
    else{
        while(ptr->link!=NULL){
            ptr=ptr->link;
        }
        ptr->link=temp;
    }
}

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}
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void delete() {  
    struct node *temp, *position;  
    int i=1, pos=1, no;  
    if (header == NULL)  
        printf("\nEmpty");  
    else {  
        printf("\nEnter Roll No");  
        scanf("%d", &no);  
  
        position = malloc(sizeof(struct node));  
        temp = malloc(sizeof(struct node));  
        temp = header;  
        while (temp->number!=no) {  
            pos++;  
            temp=temp->link;  
        }  
        temp= header;  
        while (i < pos-1) {  
            temp = temp->link;  
            i++;  
        }  
        position = temp->link;  
        temp->link = position->link;  
    }  
}
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}
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void search() {  
    struct node *temp;  
    int no, flag=0;  
    temp = malloc(sizeof(struct node));  
    if(header==NULL) {  
        printf("Empty");  
    }else{  
        printf("Enter Roll no to search");  
        scanf("%d", &no);  
        temp = header;  
        do  
        {  
            if(temp->number==no) {  
                flag =1;  
                break;  
            }  
        }
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        temp = temp->link;

    }while(temp!=NULL);
    if (flag==1)
    {
        printf("Data found");
    }
    else{
        printf("Data not found");
    }
}

}
```