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| --- |
| #include<stdio.h> |
|  | #include<stdlib.h> |
|  | #include<string.h> |
|  | int count = 0; |
|  | struct node |
|  | { |
|  | char name[20],branch[20],usn[10]; |
|  | int sem; |
|  | char phno[10]; |
|  | struct node \*next; |
|  | }\*first = NULL, \*last = NULL, \*temp = NULL; |
|  | void create () |
|  | { |
|  | char name[20], usn[10],branch[20]; |
|  | int sem; |
|  | char phno[10]; |
|  | temp = (struct node \*) malloc (sizeof (struct node)); |
|  | printf ("Enter the student details \n"); |
|  | printf ("\nName, USN, Branch,Sem,Phone Number :"); |
|  | scanf ("%s%s%s%d%s", temp->name, temp->usn, temp->branch,&temp->sem,temp->phno); |
|  | temp->next = NULL; |
|  | count++; |
|  | } |
|  | insert\_any(struct node \*a, int value) |
|  | { |
|  | char name[20], usn[10],branch[20]; |
|  | int sem; |
|  | char phno[10]; |
|  | temp = (struct node \*) malloc (sizeof (struct node)); |
|  | printf ("Enter the student details \n"); |
|  | printf ("\nName, USN, Branch,Sem,Phone Number :"); |
|  | scanf ("%s%s%s%d%s", temp->name, temp->usn, temp->branch,&temp->sem,temp->phno); |
|  | temp->next = NULL; |
|  | count++; |
|  | if(first == NULL) |
|  | { |
|  | first = temp; |
|  | last = first; |
|  | }else |
|  | { |
|  | temp -> next = first; |
|  | first = temp; |
|  | } |
|  | } |
|  | void delete\_Beg() |
|  | { |
|  | temp=first; |
|  | if(first==NULL) |
|  | { |
|  | printf("\n list is empty"); |
|  | return; |
|  | } |
|  | if(temp->next==NULL) |
|  | { |
|  | printf("The deleted node is \n"); |
|  | printf("%s\t%s\t%s\t%d\t%s",temp->name,temp->usn,temp->branch,temp->sem,temp->phno); |
|  | free(temp); |
|  | first=NULL; |
|  | }else |
|  | { |
|  | first=temp->next; |
|  | printf("The deleted node is \n"); |
|  | printf("%s\t%s\t%s\t%d\t%s",temp->name,temp->usn,temp->branch,temp->sem,temp->phno); |
|  | free(temp); |
|  | } |
|  | count--; |
|  | } |
|  | void delete\_End() |
|  | { |
|  | temp=first; |
|  | if(first==NULL) |
|  | { |
|  | printf("\n list is empty"); |
|  | return; |
|  | } |
|  | if(temp->next==NULL) |
|  | { |
|  | printf("The deleted node is \n"); |
|  | printf("%s\t%s\t%s\t%d\t%s",temp->name,temp->usn,temp->branch,temp->sem,temp->phno); |
|  | free(temp); |
|  | first=NULL; |
|  | }else |
|  | { |
|  | while(temp->next!=last) |
|  | temp=temp->next; |
|  | printf("The deleted node is \n"); |
|  | printf("%s\t%s\t%s\t%d\t%s",last->name,last->usn,last->branch,last->sem,last->phno); |
|  | free(last); |
|  | last=temp; |
|  | last->next=NULL; |
|  | } |
|  | count--; |
|  | } |
|  | void main() |
|  | { |
|  | int ch,i,n; |
|  | while(1) |
|  | { |
|  | printf("\n\n1.Insert n details student\n2.Delete from beginning\n3.Delete from last"); |
|  | printf("\n Enter your choice : "); |
|  | scanf("%d",&ch); |
|  | switch(ch) |
|  | { |
|  | case 1 : printf("\nEnter the value of n "); |
|  | scanf("%d",&n); |
|  | for(i=0;i<n;i++) |
|  | insert\_any(n,i); |
|  | break; |
|  | case 2 : delete\_Beg(); |
|  | break; |
|  | case 3 : delete\_End(); |
|  | break; |
|  | default: printf("\n Wrong Input, try again"); |
|  | } |
|  | } |
|  | } |