Program - 03

Title : **Write a Program to Implement Singly Linked List and its operations.**

Code:

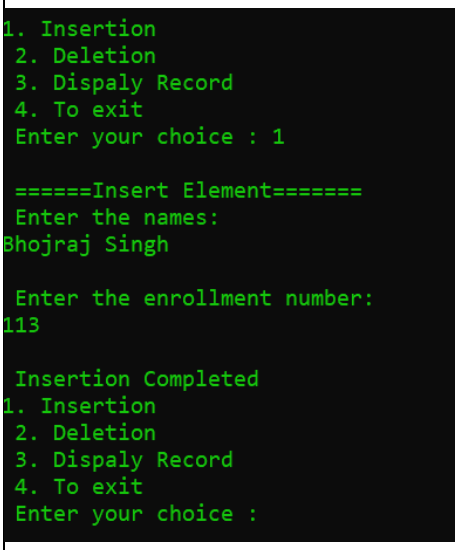
```
#include<stdio.h>
#include<stdlib.h>
#include<string.h>
struct info
{
char name[30];
int eno;
struct info *next;
};

struct info *head=NULL,*temp,*disp;
void addrecord();
void deleterecord();
void disrecord();

void main()
{
 int ch;

 while (1)
 {
  printf("\n1. Insertion");
  printf("\n 2. Deletion");
  printf("\n 3. Dispaly Record");
  printf("\n 4. To exit");
  printf("\n Enter your choice : ");
  scanf("%d",&ch);
   fflush(stdin);
  switch(ch)
  {
      case 1:
          printf("\n ======Insert Element=======");
          addrecord();
           printf("\n Insertion Completed");
           break;
      case 2:
          printf("\n ======Delete Element=======");
          deleterecord();
           printf("\n Deletion Completed");
           break;
      case 3:
           printf("\n ======Display Element=======");
          disrecord();
           break;
      case 4:exit(0);
   }
 }
}

void addrecord()
{
  struct info *add;
  char ans='y';
```

```
 while (ans=='y')
 {
 add=(struct info*)malloc(sizeof(struct info));
 printf("\n Enter the names:\n");
 gets(add->name);
 fflush(stdin);
 printf("\n Enter the enrollment number:\n");
 scanf("%d",&add->eno);

 fflush(stdin);
   if (head==NULL)
   {
       head=add;
       add->next=NULL;




 temp=add;
    }
   break;
  }


}
void deleterecord()
{
 struct info *delete;
 int teno, present=0;

 if (head==NULL)
 {
  printf("\n No records to delete\n");
  return;
 }
 printf("\n Enter the enrollment number: ");
 scanf("%d",&teno);
 fflush(stdin);

 for (delete=head;delete!=NULL;delete=delete->next)
 {
   if (delete->eno==teno)
   {
     if (head->eno==teno)
        {
        delete=head;
        head=head->next;
        free(delete);
        return;
        }
        else
        {
          temp->next=delete->next;
          free(delete);
          return;
```

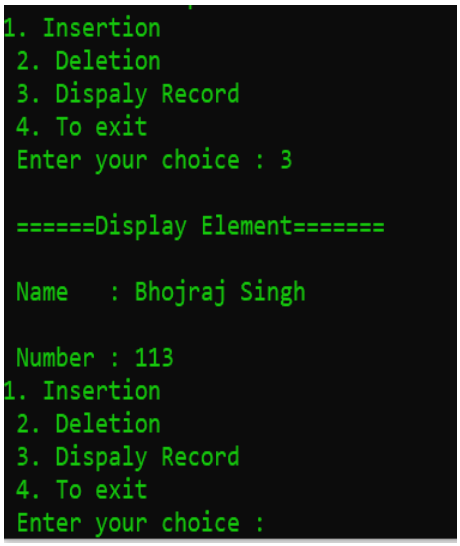
```
        }
       }
       temp=delete;
    }

 if (present==0)
  printf("\nNo such enrollment number present\n");
}
 void disrecord()
{
  if (head==NULL)
  {
   printf("\n No records to view\n");
   return;
   }
   for (disp=head;disp!=NULL;disp=disp->next)
   {
   printf("\n\n Name   : %s",disp->name);
   printf("\n\n Number : %d",disp->eno);
   }
}
```

Output :

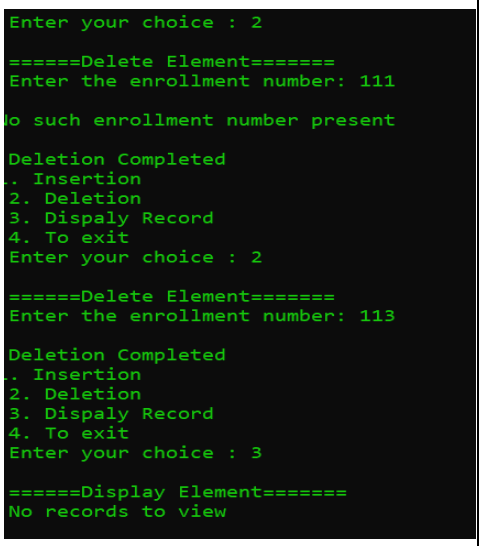
Insertion



Display



Deletion



Date : ___/____/_____	Teacher Sign ……