

TECHNO INDIA UNIVERSITY

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Batch: BCS2B

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Subject: Object Oriented
Programming

Question: Write a program to manipulate linked list supporting node operation as follow:

1. a.node=node+6; //create a new node with new information 6
2. b.node=node-2; //delete a node having information 2

Answer:

```
#include
<iostream> using
namespace std;
struct node
{
    int data;
    struct node *next;
} * head;
class LinkedList
{
public:
    LinkedList
    ()
    {
        head = NULL;
    }
}
```

```

struct node *operator+(int n)
{
    struct node *temp = new
    node; temp->data = n;
    temp->next =
    head; return temp;
}

struct node *operator-(int n)
{
    if (head->data == n)
    {
        struct node *temp1 = new node;
        temp1 = head->next;
        head->next =
        NULL; delete
        head;
        return temp1;
    }
    else
        return head;
}

```

```

void operator=(struct node *a)
{
    head = a;
}
};

int main()
{
    LinkedList a;
    int d;
    for (int i = 1; i <= 3; i++)
    {
        cout << "Enter the element no : " << i << " " << endl;
        cin >> d;
        a = a + d;
    }

    cout << head->data << " " << head->next->data << " " << head->next-
>next->data <<
    endl; a = a - d;
    cout << "Elements after deletion : " << endl;

```

```
cout << head->data << " " << head->next->data << " " << head->next->next->data << endl;

}
```

OUTPUT

```
PS D:\> g++ -o new new.cpp
PS D:\> ./new
Enter the element no : 1
11
Enter the element no : 2
22
Enter the element no : 3
33
33 22 11
Elements after deletion :
PS D:\> █
```