stackll\_07.cpp

**Compile:** g++ stackll\_07.cpp -o stackll\_07

**Run:** ./stackll\_07

**Program:**

#include <iostream>

#include <stdlib.h>

using namespace std;

struct node

{

struct node \*next;

int data;

};

struct node \*p,\*q,\*s,\*list=NULL;

int ch,data1,data2,top=-1;

classstack\_linked

{

public:

void menu()

{

do

{

cout<<"\nChoose from the foll: 1.Push 2.Pop 3.Display 4.Exit\n";

cin>>ch;

switch(ch)

{

case 1:push();

break;

case 2:pop();

break;

case 3:display();

break;

case 4:break;

default:cout<<"\nEnter valid option";

break;

}

}while(ch!=4);

}

void push()

{

insertb();

}

void pop()

{

deleteb();

}

voidinsertb()

{

p=(struct node\*)malloc(sizeof(node));

cout<<"\nEnter the element you want to push: ";

cin>>data1;

p->data=data1;

if(top==-1)

{

++top;

list=p;

list->next=NULL;

}

else

{

++top;

p->next=list;

list=p;

}

cout<<"\nElement "<<data1<<" is inserted";

}

void display()

{

if(top==-1)

{

cout<<"\n Stack is empty :( :(";

}

else

{

q=list;

while(q!=NULL)

{

cout<<q->data<<"===>";

q=q->next;

}

}

}

voiddeleteb()

{

if(top==-1)

{

cout<<"\nCannot pop elements as stack is empty :( :(";

}

else

{

q=list;

list=list->next;

cout<<"\nElement "<<q->data<<" is deleted";

free(q);

top--;

}

}

};

int main()

{

stack\_linked s;

s.menu();

return 0;

}

**Output:**

