**Aim:**

To write a menu driven program to insert , display & Delete elements in a Linked Stack.

**Source Code:**

#include<iostream.h>

#include<stdlib.h>

#include<process.h>

struct Node

{

int info;

Node \* next;

}

\*top, \*newptr, \*save, \*ptr;

Node \* Create\_New\_Node(int);

void Push(Node\*);

void Display(Node\*);

void Pop();

int main()

{

top=NULL;

int inf;

int ch;

system("cls");

do

{

system("cls");

cout<<" \t\t\t Linked Stack Menu\n " ;

cout<<" \t 1. Insert\n ";

cout<<" \t 2. Delete\n ";

cout<<" \t 3. Display\n ";

cout<<" \t 4. Exit\n ";

cout<<" Enter your choice (1-4)... ";

cin>>ch;

switch(ch)

{

case 1:

{

cout<<" \n Enter INFOrmation for the new node... ";

cin>>inf;

newptr=Create\_New\_Node(inf);

if(newptr==NULL)

{

cout<<" \nCannot create new node!!! Aborting!!\n ";

system("pause");

exit(1);

}

Push(newptr);

system("pause");

break;

}

case 2 :

{

cout<<" \n The Stack is : \n ";

Display(top);

system("pause");

cout<<"Want to pop an element? (y/n)... ";

char ch2;

cin>>ch2;

if(ch2=='y'||ch2=='Y');

Pop();

cout<<" \n The Stack now is : \n ";

Display(top);

system("pause");

break;

}

case 3:

{

cout<<" \n The Stack now is : \n ";

Display(top);

system("pause");

break;

}

case 4:

{

break;

}

default :

cout<<" Valid choices are 1...4 only\n ";

system("pause");

break ;

}

}while(ch!= 4);

return 0 ;

}

Node \* Create\_New\_Node( int n )

{

ptr=new Node;

ptr->info=n;

ptr->next=NULL;

return ptr;

}

void Push(Node\* np)

{

if(top==NULL)

top = np;

else

{

save=top;

top=np;

np->next=save;

}

}

void Pop()

{

if(top==NULL)

cout<<" UNDERFLOW !!!\n ";

else

{

ptr=top;

top=top->next;

delete ptr;

}

}

void Display( Node\* np )

{

while(np!=NULL)

{

cout<<np->info<<" ->";

np=np->next;

}

cout<<" !!!\n ";

}

**Output :**

 