Ajith.MS
1BM14CS010

LAB 8

Stack using LL

```
#include<stdio.h>
#include<stdlib.h>

void push();
void pop();
void display();
struct node
{
int data;
struct node *next;
};
struct node *top=NULL;

int main()
{
  int choice;
printf("Stack Implementation using LL");
do
{printf("1. Push, 2. Display 3. Pop. 4 Exit");
 printf("Enter choice");
 scanf("%d",&choice);
switch(choice)
{
case1: push(); break;
case2: display(); break;
case3: pop(); break;
case4: exit(0);
}
```

```
} while(choice!=4);
}
void push()
{ int item;
struct node *newnode;
printf("Enter the elemt ");
scanf("%d",&item);
newnode=(struct node*)malloc(sizeof(struct node));
newnode->data=item;
newnode->next=NULL;
if(top==NULL)
   top=newnode;
else
   newnode->next=top;
   top=newnode;
}
void pop()
{ if(top==NULL)
   printf("Stack is empty");
else
{
  printf("element popped is %d",top->data);
   top=top->next;
  }}
void display()
{ struct node*temp;
temp=top;
if(top==NULL)
```

```
printf ("Stack is empty");
while (temp != NULL)
{
    printf ("%d", temp->data);
    temp = temp->next;
}
}
```