Lab program 9a : stack

```
struct node
{
    int data;
    struct node *next;
};

void push ( struct node **headptr, int value)
{
    struct node *newnode, *temp;
    newnode = (struct node *) malloc ( sizeof (struct node));
    newnode -> data = value;
    newnode -> next = NULL;
    temp = *headptr;
    if ( temp == NULL)
        *headptr = newnode;
    else
    {
        while (temp -> next != NULL)
            temp = temp -> next;
        temp -> next = newnode;
    }
}

void pop (struct node **headptr)
{
    struct node *temp;
    temp = *headptr;
    if ( temp == NULL)
    {
        printf (" The list is empty: \n") ;
        return;
    }
    else if (temp -> next == NULL)
    {
        *headptr = NULL;
        printf (" Last element has been deleted \n");
        return;
    }
    else
    {
        while ((temp -> next) -> next != NULL)
            temp = temp -> next;
        temp -> next = NULL;
        printf (" Top element has been deleted \n");
    }
}
```

```
void display (struct node * temp)
{
    if (temp == NULL)
    {
        printf (" the list is empty:: !\n");
        return;
    }
    else
    {
        while (temp != NULL)
        { printf ("%d \t", temp -> data);
            temp = temp -> next;
        }
        printf ("\n");
    }
}
```