IBM19CS002
AAKASH ANAND

LAB-1

```
#include <stdio.h>
#include <stdlib.h>
#define MAX 5

int top=-1, stack[MAX];
void push();
void pop();
void display();

void main()
{ int ch;
  while(1)
  {
    printf("\n*** Stack Menu ***");
    printf("\n\n1. Push \n2. pop \n3. Display
            \n4. Exit");
    printf("\n\n Enter your choice (1-4): ");
    scanf("%d", &ch);

    Switch(ch) {
    Case 1: push(); break;
    Case 2: pop(); break;
    Case 3: display();
            break;
    Case 4: exit(0);

    default: printf("\n Wrong choice!");
    }
}
```

```
void push()
{
  int val;
  if(top==MAX-1)
  {printf("\n stack is full!");
  }
  else{
  printf("\n Enter element to push:");
  Scanf("%d",&val);
  top=top+1;
  stack[top]=val;
  }
}

void pop()
{
  if(top==-1)
  {printf("\n stack is empty!!");}
  else{
   printf("\n Deleted element is %d",stack[top]);
    top=top-1;
  }
}

void display()
{ int i;
   if(top==-1)
  {printf("\n stack is empty!!");}
  else{
   printf("\n stack is...\n");
    for(i=top;i>0;--i)
    printf("%d\n",stack[i]);
}
```