

STACK OPERATIONS

CODE:

```
#include<stdio.h>

#include<conio.h>

#define max 5

int top=-1;

int st[max],i,ele;

void push(int st[],int ele);

int pop();

void display();

void main()

{

    int ch,i,n;

    do

    {

        printf("\t\n***menu***\n1.push\n2.pop\n3.display\n4.exit\n");

        printf("enter your choice");

        scanf("%d",&ch);

        switch(ch)

        {

            case 1:

                {

                    printf("enter the elements\t");

                    scanf("%d",&n);
```

```
        push(st,n);
        break;
    }
case 2:
    {
        n=pop();
        break;
    }
case 3:
    display();
    break;
case 4:
    exit(0);
    break;
}
}

while(ch!=5);

getch();
}

void push(int st[],int ele)
{
    if(top==max-1)
    {
        printf("\t stack is full");
    }

    else
```

```
        top++;
        st[top]=ele;
    }
int pop()
{
    int ele;
    if(top== -1)
    {
        printf("\t stack is empty");
    }
    else
    {
        ele=st[top];
        top--;
        printf("element deleted is %d",ele);
        return ele;
    }
}
void display()
{
    int i;
    if(top== -1)
    {
        printf("\t stack is empty");
    }
}
```

```
else
{
    for(i=top;i>=0;i--)
    {
        printf("%d\t",st[i]);

    }

}

}
```

OUTPUT:

```
***menu***
1.push
2.pop
3.display
4.exit
enter your choice1
enter the elements      3

***menu***
1.push
2.pop
3.display
4.exit
enter your choice2
element deleted is 3
***menu***
1.push
2.pop
3.display
4.exit
enter your choice3
      stack is empty
***menu***
1.push
2.pop
3.display
4.exit
enter your choice4

Process returned 0 (0x0)   execution time : 25.107 s
Press any key to continue.
```