

LAB2 - stack Implementation :

```
#include <stdio.h>
#include <process.h>
#include <conio.h>

int top = -1;
void push (int item, int s[], int top)
```

```
{
    if (top == STACK_SIZE-1)
        printf ("stack overflow")
```

```
    else
```

```
    { top ++;
```

```
      s[top] = item;
```

```
    }
    int pop (int s[], int top)
```

```
    {
```

```
        if (top == -1)
```

```
        {
            printf ("stack underflow");
```

```
        return;
```

```
    }
    else
```

```
        return (s[top--]);
```

```
void display (int top, int s[]),
```

```
{ int i;
```

```
    if (top == -1)
```

```
        printf ("Empty stack");
```

```
    else
```

```
    { for (i = 0, i < top, i++)
```

```
        printf ("%d \n", s[i]);
```

}

void main()

{

int item, s[10], item_delete;

int n;

for (i)

printf("1-push\n 2-pop\n 3-display\n n-exit");

}

switch(n)

{

case 1: printf("Enter item");

scanf("%d", &item);

push(item, s, top);

break;

case 2: item_del = pop(s, top);

printf("The deleted item = %d", &item_del);

break;

case 3: display(top, s);

break;

default: exit(0);

}

}

}