using POINTERS –

```c
#include <stdio.h>
#include <process.h>
#include <conio.h>
#define STACK-SIZE 5
int top =-1;
void push (int item, int s[], int *top)
{

    if (*top == STACK_SIZE -1)
    {

        printf ("stack overflow \n ");
    return;
    }

    * top = *top +1;
```

```
    s[*top] = item;
    }
    int pop (int s[], int *top)
    {
    int item-deleted;
    if (*top == -1)
    {
    printf ("stack underflow cannot delete \n");
    return 0;
    }
    item-deleted = s[*top];
    *top = *top-1;
    return item-deleted;
    }
    void display (int top, int s[])
    {
    int i;
    if (top == -1)
    {
    printf (" stack is empty \n");
    return;
    }
    printf ("contents of the stack \n");
    for (i=0; i<= top; i++)
```

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

void main ()
{
int item, s[10];
int item_deleted;
int choice;
clrscr ();
for (;;)
{
printf("\n 1: push \n 2: pop \n 3: display \n 4: exit \n");
printf(" enter the choice :\n");
scanf ("%d", &choice);
switch (choice)
{
case 1: printf ("enter the item to be inserted \n ");
        scanf ("%d", &item);
        push (item, s, &top);
        break;
case 2: item_deleted = pop (s, &top);
        if (item_deleted != 0)
        printf ("\n item deleted is %d \n", item_deleted);
        break;
```

```
case 3:  display (top, s);
           break;

default : exit (0);
    }
}

getch ();
    }
```