```c
#include <stdio.h>
#include<conio.h>
#define STACK_SIZE 3
int top =-1;
int s[10];
int item;
void push()
{
  if (top==STACK_SIZE-1)
  {
    printf("stack overflow\n");
    return ;
  }
  top= top+1;

  s[top]=item;


}
int pop()
{
  if (top==-1)
  {
    printf("the stack is empty\n");
    return -1 ;
  }

  return s[top--];
}
 void display()
{
```

stacks.c

```c
  int i;
  if(top==-1)
  {
    printf("the stack is empty\n");
    return;
  }
  printf("the contents of the stack are\n");
  for(i=top;i>=0;i--)
  {
    printf("%d\n",s[i]);

  }
}

int main()


{

  int deleted_item;
  int choice;
  for(;;)
  {

  printf("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);
```

Line: 1 Col: 0

```
54  {
55
56   printf("1:push\n 2:pop\n 3:display\n 4:exit\n");
57   printf("enter the choice\n");
58   scanf("%d",&choice);
59   switch(choice)
60  {
61    case 1: printf("enter the item to be inserted\n");
62    scanf("%d",&item);
63    push();
64    break;
65    case 2: deleted_item = pop();
66           if(deleted_item==-1)
67           return ;
68           else
69           printf("the deleted item is %d\n",deleted_item);
70           break;
71           case 3:display();
72           break;
73           default: exit(0);
74
75
76
77  }
78
79
80  }
81
82   return 0;
83
84 }
```

```
#include <stdio.h>
#include <conio.h>
#define STACK_SIZE 7
int top = -1;
int s[10];
int item;
void push()
{ if (top == STACK_SIZE-1)
  {
    printf("stack overflow\n");
    return
  }
  top = top+1;
  s[top] = item;
  }
  int pop()
  {
    if (top == -1)
    {
    printf("the stack is empty\n");
    return -1;
    }
    return s[top--];
  }
  void display()
  {
    int i;
    if (top == -1)
    {
      printf("the stack is empty\n");
      return;
    }
    printf("the contents of the stack are\n");
      for (i=top; i>=0; i--)
```

```
{printf("%d\n",s[i]);
 }
}int main()
{
 int deleted_item;
 int choice;
 for(;;)
{
printf("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();
     break;
     case 2 : deleted_item = pop();
              if(deleted_item==-1)
               return;
               else
               printf("the deleted item is %d\n",deleted_item);
          break;
     case 3: display();
      break;
      default : exit(0);

   }
   }
   return 0;

   }
```