```
#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)
  {
    Pf ("stack overflow\n");
    return;
  }
  s[top = top + 1;
  S[top] = item;
}
int pop (int s[], int top) ~~int count~~)
{
  int item_deleted;
  if (top == -1).
  {
  Pf. ("stack underflow can't delete\n");
    return 0;
  }
  item deleted = s[top];
    top = top - 1; ~~count = count + 1;~~
  return item deleted;
```

```
void display (int top, int S[])
{
  int i;
  if (top == -1)
  {
    pf("stack is empty \n");
    return;
  }
  pf("Contents of stack \n");
  for (i = 0; i <= top; i++)
  {
    pf("%d \n", S[i]);
  }
}
void main()
{
  int item, S[10]; item deleted;
  int choice, count;
for (;;)
{
  pf("\n 1: push \n 2: pop \n 3: display \n
      4 for exit \n");
  pf("Enter choice \n");
  sf("%d", &choice);
```

```
switch (choice)
{
  case 1 : pf ("Enter the item to be
                inserted \n");
           sf ("%d", &item);
           push (item, S, top);
           break;
  case 2 : item_deleted = pop(S, top);
           if (item_deleted != 0)
           pf ("Item deleted %d \n",
                item_deleted);
           break;
  case 3 : display (top, S);
           break;
  default : exit(0);
  }
}
getch();
}
```