

```
#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 can't delete\n");
```

```
    }  
    return 0;
```

```

item_deleted = s[top]
*top = *top - 1;
return item_deleted;
}

void display(int top, ints[])
{
    int i;
    if (*top == -1)
    {
        printf("Stack is empty\n");
        return;
    }
    printf("Contents of stack\n");
    for(i = 0; i <= top; i++)
    {
        printf("%d\n", s[i]);
    }
}

void main()
{
    int item, s[0];
    int item_deleted;
    int choice;
    clrscr();
    for(;;)
    {
        printf("\n 1: push\n 2: pop\n 3: display\n 4: exit\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("\nitem deleted is %d\n", item_deleted);
            break;

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

    default: exit(0);
}
}
getch();
}

```