```
#include <stdio.h>
#include <conio.h>
#define stacksize 5
int top = -1;
int s[10];
int item;
void push()
{
if (top == stacksize - 1)
{
printf("stack overflow\n");
return;
}
top = top + 1;
s[top] = item;
}
int pop()
{
if (top == -1) return -1;
return s[top--];
}
void display()
{
int i;
if (top == -1)
{
```

```
printf ("stack is empty \n");
return ;
}
printf ("contents of the stack \n");
for (i=0; i<=top; i++)
{
printf ("%d", s[i]);
}
}
void main ()
{
int item_delete;
int choice;
while (1)
{
printf ("\n 1.push \n 2. pop \n 3. display ");
printf("enter the choice \n");
scanf ("%d", &choice);
switch (choice)
{
case 1: printf ("enter item to be inserted \n");
scanf ("%d", &item);
break;
```

```
Case 2: item_delete = pop();
        if(item_delete == -1)
        printf("stack is empty\n");
        else
        printf("item deleted is %d\n", item_delete);
        break;
        Case 3: display();
            break;
        default: printf("invalid\n");
                break;
        }
    }
    getch();
}
```

```c
#include<stdio.h>
#include<conio.h>
#define stacksize 5
int top=-1;
int s[10];
int item;
void push()
{
 if(top==stacksize-1)
 {
    printf("stack overflow \n");
    return ;
 }
 top=top+1;
 s[top]=item;
}
int pop()
{
    if(top==-1)  return -1;
    return s[top--];
}
void display()
{
    int i;
    if(top==-1)
    {
     printf("stack is empty \n");
     return ;
```

```
    printf("stack is empty \n");
    return ;
   }
   printf("contents of the stack \n");
   for(i=0;i<=top;i++)
   {
       printf("%d",s[i]);
   }
}
void main()
{
   int item_delete;
   int choice;
   while(1)
   {
       printf("\n 1.push \n 2.pop \n 3.display  " );
       printf("enter the choice \n ");
       scanf("%d",&choice);
       switch(choice)
       {
           case 1: printf("enter item to be inserted \n");
                   scanf("%d",&item);
                   push(item);
                   break;
           case 2: item_delete=pop();
                   if(item_delete==-1)
                   printf("stack is empty \n");
                   else
                   printf("item deleted is %d \n",item_delete);
```

main.c

```
    int item_delete;
    int choice;
    while(1)
    {
        printf("\n 1.push \n 2.pop \n 3.display  " );
        printf("enter the choice \n ");
        scanf("%d",&choice);
        switch(choice)
        {
            case 1: printf("enter item to be inserted \n");
                    scanf("%d",&item);
                    push(item);
                    break;
            case 2: item_delete=pop();
                    if(item_delete==-1)
                    printf("stack is empty \n");
                    else
                    printf("item deleted is %d \n",item_delete);
                    break;
            case 3: display();
                    break;

            default: printf("invaild \n");
                     break;
        }
    }
    getch();
}
```