```c
#include<stdio.h>
#define MAX 3
int s[10],top=-1,i,item,ch;
void push();
int pop();
void display();
void main()
{
    while(1)
    {
    printf("\n 1.PUSH \n 2.POP \n 3.DISPLAY \n 4.EXIT \n");
    printf("Enter your choice: ");
    scanf("%d",&ch);
    switch(ch)
    {
    case 1:
        push();
        break;
    case 2:
        item=pop();
```

```
        if(item!=-1)
            printf("Popped element=%d",item);
        break;
    case 3:
        display();
        break;
    case 4:
        exit(0);
    }
  }
}
void push()
{
    if(top==MAX-1)
    {
        printf("Stack overflow");
        return;
    }
    top=top+1;
    printf("Enter the element to be pushed: ");
```

```
    top=top+1;
    printf("Enter the element to be pushed: ");
    scanf("%d",&item);
    s[top]=item;
}
int pop()
{
    if(top==-1)
    {
        printf("stack underflow");
        return(-1);
    }
    item=s[top];
    top=top-1;
    return item;
}
void display()
{
    if(top==-1)
    {
```

```
    {
        printf("stack underflow");
        return(-1);
    }
    item=s[top];
    top=top-1;
    return item;
}
void display()
{
    if(top==-1)
    {
        printf("Stack is empty");
        return;
    }
    printf("Stack contents: ");
    for(i=top;i>=0;i--)
        printf("%d\n",s[i]);
}
```

```
 1.PUSH
 2.POP
 3.DISPLAY
 4.EXIT
Enter your choice: 1
Enter the element to be pushed: 10

 1.PUSH
 2.POP
 3.DISPLAY
 4.EXIT
Enter your choice: 1
Enter the element to be pushed: 2

 1.PUSH
 2.POP
 3.DISPLAY
 4.EXIT
Enter your choice: 1
Enter the element to be pushed: 3

 1.PUSH
 2.POP
 3.DISPLAY
 4.EXIT
Enter your choice: 3
Stack contents: 3
2
10

 1.PUSH
 2.POP
 3.DISPLAY
 4.EXIT
```