```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#define MAX 100

Int stack[MAX];
Int top= -1;
//function to check if stack is full
Int isfull()
{
   Return top==MAX-1;
}

//function to checkif stack is empty
Int isempty()
{
   Return top== -1;
}

//push operation
Void push(int value)
{
   If (isfull())
   {
      Printf("\n stack overflow! Cannot push %d \n",value);
      }
      Else
```

```
        {
            Top=top+1;
            Stack[top]=value;
            Printf("%d pushed onto stack \n",value);
        }
}
Int pop()
{
    If (isempty())
    {
        Printf("\n stack empty cannot pop \n");
    }
    Else
    {
        Int val=stack[top];
        Top=top-1;
        Printf("popped element is %d \n",val);
        Return val;
    }
}
Void display()
{
    If (isempty())
    {
        Printf("\n stack is empty");
    }
    Else
```

```
    {
        Printf("\n stack contents(top to bottom)");
        For(int i=top;i>=0;i--)
        {
            Printf("%d \n",stack[i]);
        }
    }
}

Void main()
{
    Pop();
    Push(10);
    Display();
    Push(10);
    Display();
    Pop();
    Display();
    Pop();
    Display();
    Pop();
}
```

OUTPUT:

Stack empty cannot pop

10 pushed onto stack

```
 Stack contents(top to bottom)10
10 pushed onto stack

 Stack contents(top to bottom)10
10
Popped element is 10

 Stack contents(top to bottom)10
Popped element is 10

 Stack is empty
 Stack empty cannot pop


=== Code Exited With Errors ===
```