1. Write the three-address code (TAC) of the following:

a. Any if-statement of your choice

```
if a>b goto Ltrue
    goto L1
L1: if a<b goto Lfalse
Ltrue: a + b
Lfalse: a - b
```

b. Any for-loop of your choice

```
L:      i = 0
        if (i <= g) EXIT
        goto L1
L1:     t1= b*c
        t2= a+t1
        x=t2
        i=i+1
        goto L
EXIT
```

c. Any while-loop of your choice

```
        i = 0
        if (i <= g) EXIT
        goto L1
L1:     t1= b*c
        t2= a+t1
        x=t2
        i=i+1
EXIT
```

2. Write the triple implementation of one of the TAC's in question 1 above.

For the following code used in the for loop

```
t1= b*c
```

t2= a+t1

x=t2

The equivalent triple implementation of the code above is:

	op	*arg1*	*arg2*
(0)	*	*b*	*c*
(1)	+	*a*	*(0)*
(2)	=	*(1)*	