

Nombre: Javier Eduardo Lopez Ontiveros

```
program ejemplo {  
    int a = 0;  
    int b = 0;  
    int c = 0;  
    a = 5;  
    b = 6;  
    c = 3;  
    int suma = a + b;  
    int resta = a - c;  
    int suma2 = suma - resta;  
}
```

.data

```
a    dw    0  
b    dw    0  
c    dw    0  
suma    dw    ?  
resta    dw    ?  
suma2    dw    ?
```

.code

mov = 1100011w

w = 1 si es 16 bits

w = 0 si es 8 bits

mod = 11

r/m = 000

mov a, 5 = 1100 0111 1100 0000 0000 0000 0000 0101

mov b, 6 = 1100 0111 1100 0000 0000 0000 0000 0110

mov c, 3 = 1100 0111 1100 0000 0000 0000 0000 0011

mov = 100010dw

add = 000000dw

mov ax, a = 1000 1011 1100 0000

add ax, b = 0000 0011 1100 0000

mov suma, ax = 1000 1011 1100 0000

sub = 000101dw

mov ax, a = 1000 1011 1100 0000

sub ax, c = 0001 0111 1100 0000

mov resta, ax = 1000 1011 1100 0000

mov ax, suma = 1000 1011 1100 0000

sub ax, resta = 0001 0111 1100 0000

mov suma2, ax = 1000 1011 1100 0000