

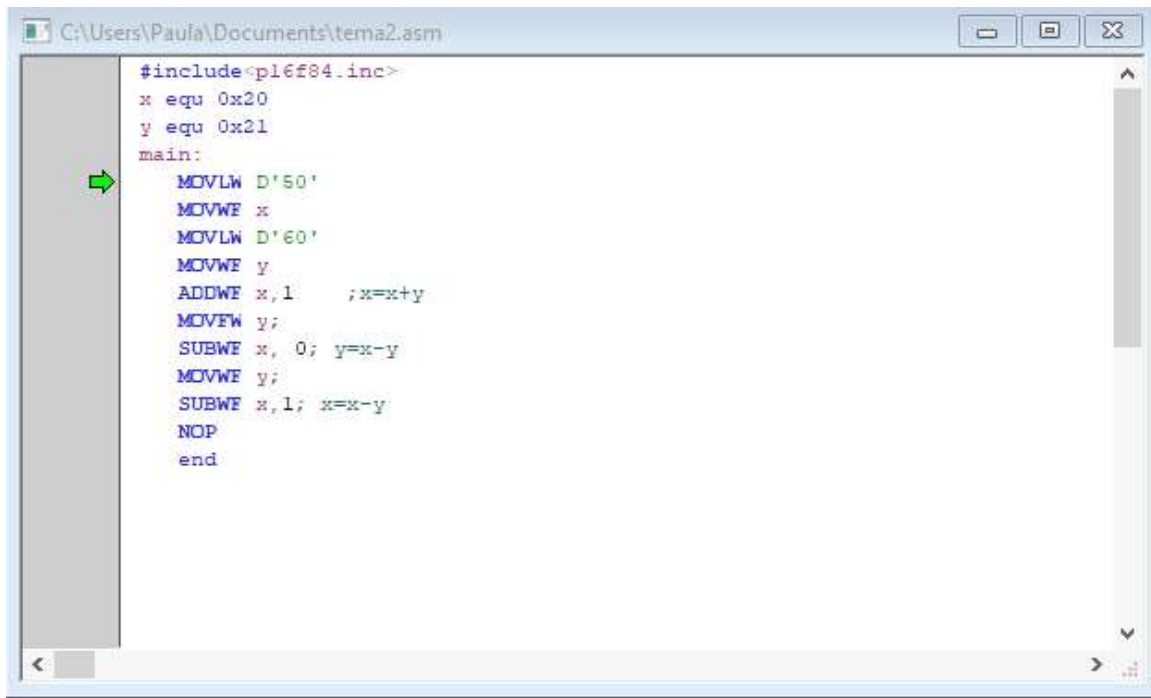


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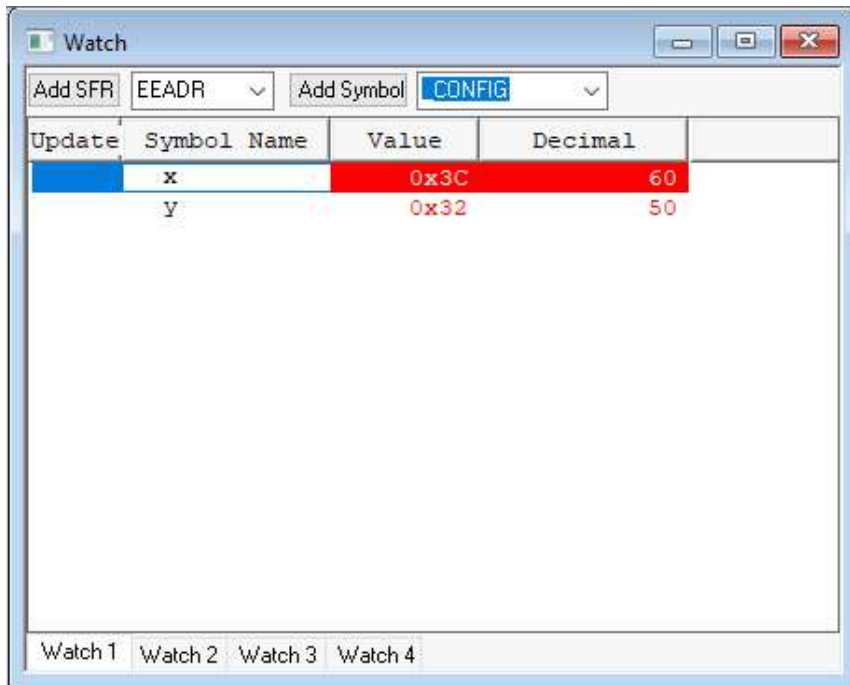
# TEMA 1 MM

Interschimbarea a doua numere fara variabila auxiliara( asm)

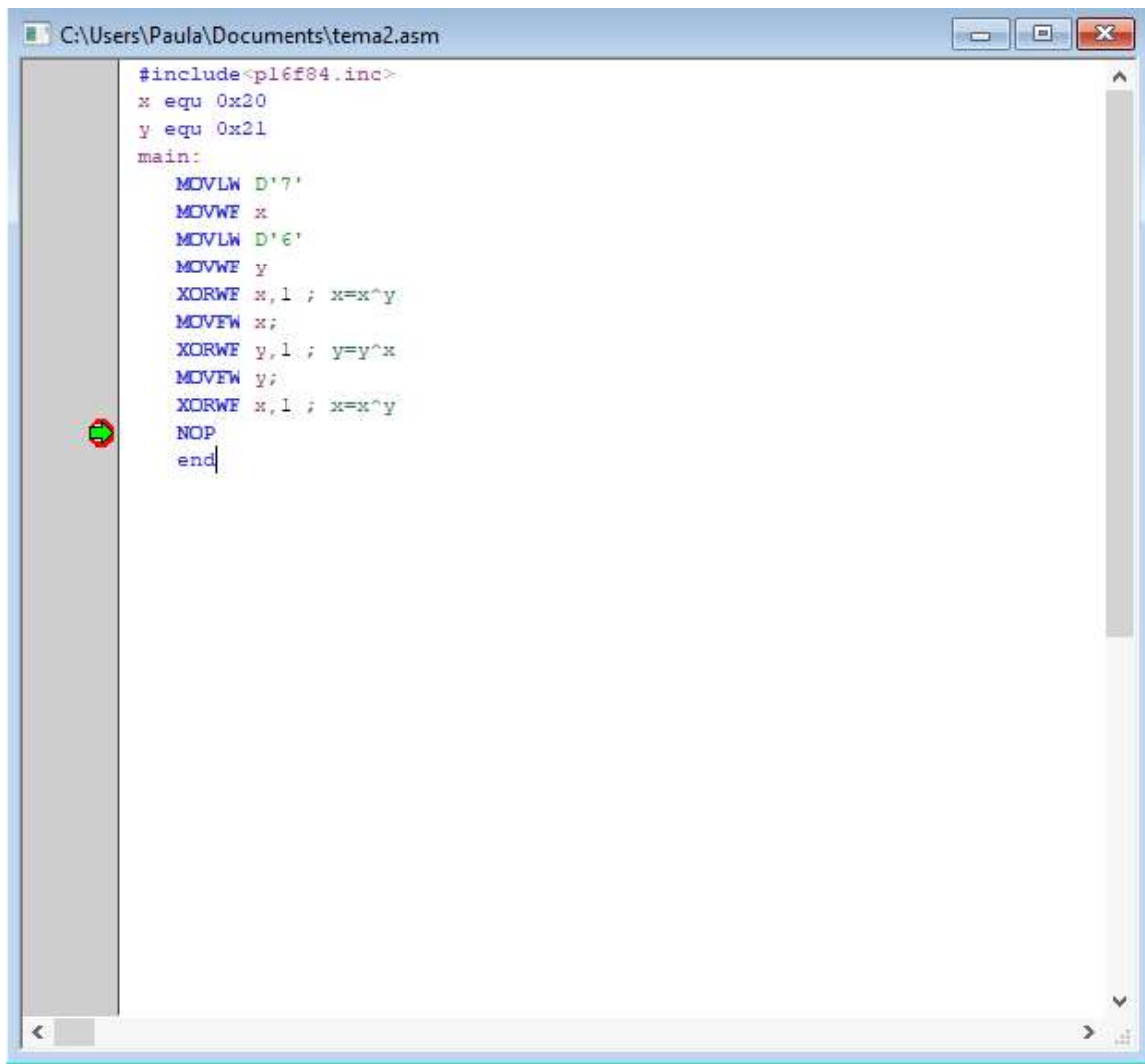
a) cu adunari si scaderi



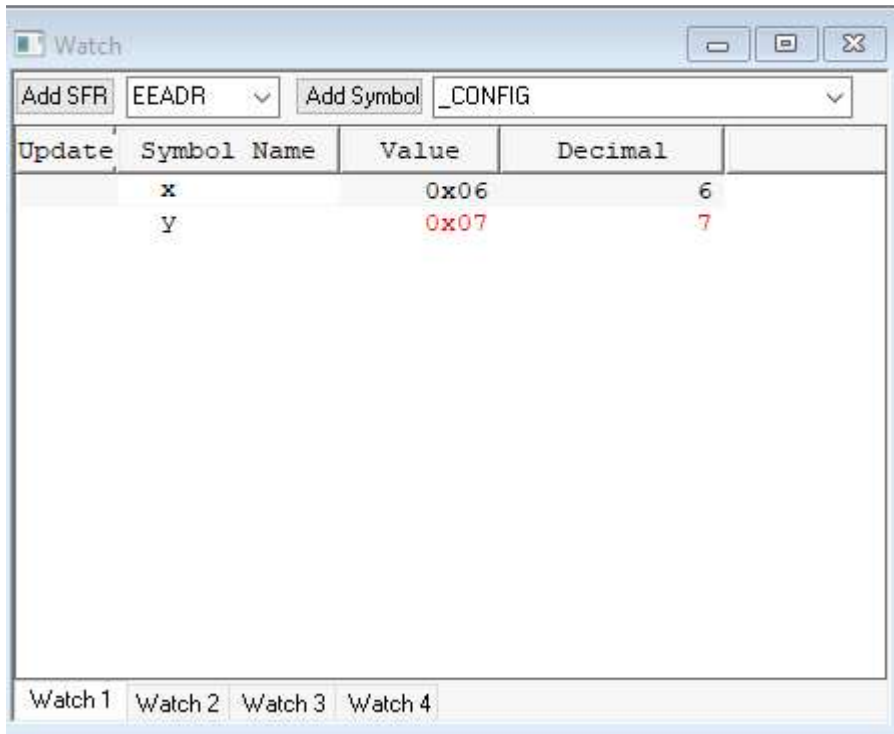
```
#include<pl6f84.inc>
x equ 0x20
y equ 0x21
main:
    MOVLW D'50'
    MOVWF x
    MOVLW D'60'
    MOVWF y
    ADDWF x,1    ;x=x+y
    MOVFW y;
    SUBWF x, 0; y=x-y
    MOVWF y;
    SUBWF x,1; x=x-y
    NOP
end
```



b)cu XoR



```
#include<pic16f84.inc>
x equ 0x20
y equ 0x21
main:
    MOVLW D'7'
    MOVWF x
    MOVLW D'6'
    MOVWF y
    XORWF x,1 ; x=x^y
    MOVWF x;
    XORWF y,1 ; y=y^x
    MOVWF y;
    XORWF x,1 ; x=x^y
    NOP
end
```



## Tema de nota 7

Transfer de variabile :  $x \rightarrow y$ ,  $y \rightarrow z$ ,  $z \rightarrow x$

2 pasi: interschimbare x si y , apoi x si z

a)ASM

```
C:\Users\Paula\Documents\tema2.asm

#include<pl6f84.inc>
x equ 0x20
y equ 0x21
z equ 0x22
main:
    MOVLW D'1'
    MOVWF x
    MOVLW D'2'
    MOVWF y
    MOVLW D'3'
    MOVWF z
    ;interschimbare x si y
    MOVFW y
    ADDWF x,1 ;x=x+y
    MOVFW y;
    SUBWF x, 0; y=x-y
    MOVWF y;
    SUBWF x,1; x=x-y
    ;x si z
    MOVFW z
    ADDWF x,1 ;x=x+y
    MOVFW z;
    SUBWF x, 0; y=x-y
    MOVWF z;
    SUBWF x,1; x=x-y
    NOP
    end
```

Update	Symbol Name	Value	Decimal
	x	0x03	3
	y	0x01	1
	z	0x02	2

Watch 1 Watch 2 Watch 3 Watch 4

b)C#

C:\Users\Paula\Desktop\t.c

```
#include<htc.h>
unsigned char x@0x20,y@0x21,z@0x22;
void main(void)
{
    x = 1;
    y = 2;
    z = 3;

    x+=y;
    y=x-y;
    x-=y;

    x+=z;
    z=x-z;
    x-=z;
    asm("NOP");
}
```

Watch

Add SFR EEADR Add Symbol x

Update	Symbol Name	Value	Decimal
	x	0x03	3
	y	0x01	1
	z	0x02	2

Watch 1 Watch 2 Watch 3 Watch 4



