

Practica 1 - Subrutinas

7 de septiembre de 2012

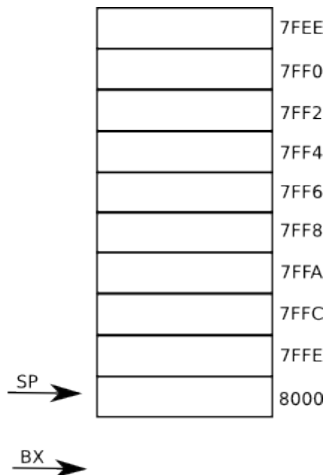
Subrutinas

```

ORG 3000H ; Subrutina MUL
MUL: PUSH BX
      MOV BX, SP
      PUSH CX
      PUSH AX
      PUSH DX
      ADD BX, 6
      MOV CX, [BX]
      ADD BX, 2
      MOV AX, [BX]
SUMA: ADD DX, AX
      DEC CX
      JNZ SUMA
      SUB BX, 4
      MOV AX, [BX]
      MOV BX, AX
      MOV [BX], DX
      POP DX
      POP AX
      POP CX
      POP BX
      RET

ORG 2000H ; Programa Principal
MOV AX, NUM1
PUSH AX
MOV AX, NUM2
PUSH AX
MOV AX, OFFSET RES
PUSH AX
MOV DX, 0
CALL MUL
POP AX
POP AX
POP AX
HLT
END

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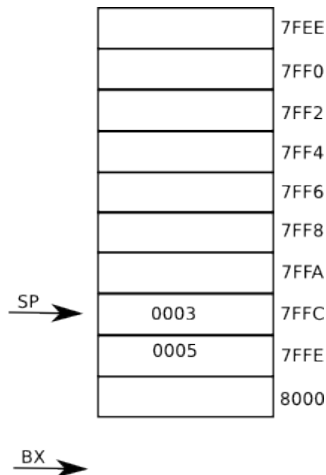


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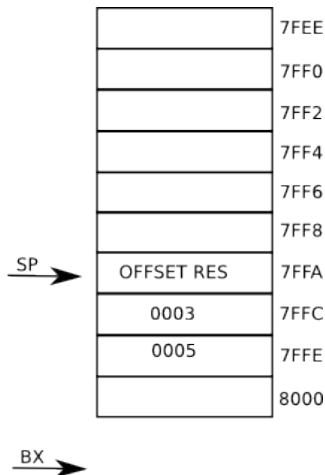


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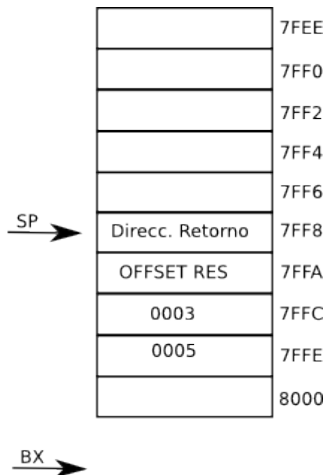


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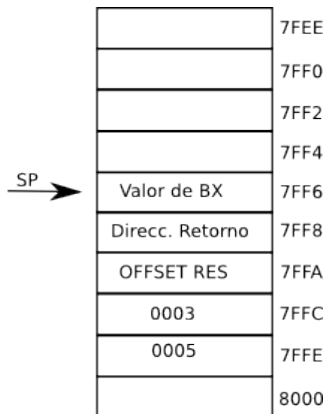
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    MOV AX, [BX]
    MOV BX, AX
    MOV [BX], DX
    POP DX
    POP AX
    POP CX
    POP BX
    RET

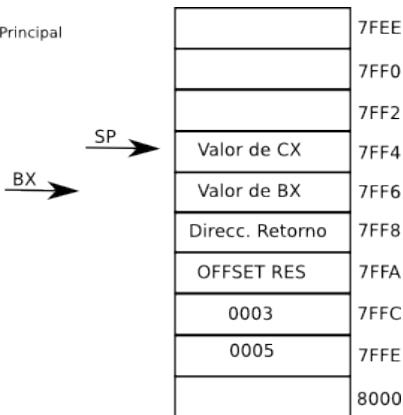
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	7FEE
	7FF0
	7FF2
	7FF4
Valor de BX	7FF6
Direcc. Retorno	7FF8
OFFSET RES	7FFA
0003	7FFC
0005	7FFE
	8000

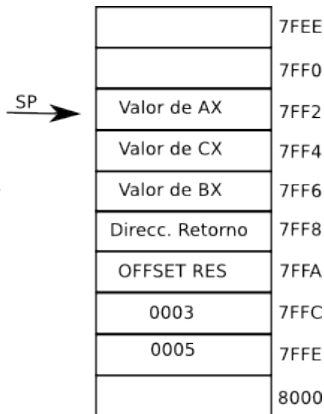
Subrutinas

ORG 3000H ; Subrutina MUL	ORG 2000H ; Programa Principal
MUL: PUSH BX	MOV AX, NUM1
MOV BX, SP	PUSH AX
PUSH CX	MOV AX, NUM2
PUSH AX	PUSH AX
PUSH DX	MOV AX, OFFSET RES
ADD BX, 6	PUSH AX
MOV CX, [BX]	MOV DX, 0
ADD BX, 2	CALL MUL
MOV AX, [BX]	POP AX
SUMA: ADD DX, AX	POP AX
DEC CX	POP AX
JNZ SUMA	HLT
SUB BX, 4	END
MOV AX, [BX]	
MOV BX, AX	
MOV [BX], DX	
POP DX	
POP AX	
POP CX	
POP BX	
RET	



Subrutinas

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PUSH CX	MOV AX, NUM2
PUSH AX	PUSH AX
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ADD BX, 2	CALL MUL
MOV AX, [BX]	POP AX
SUMA: ADD DX, AX	POP AX
DEC CX	POP AX
JNZ SUMA	HLT
SUB BX, 4	END
MOV AX, [BX]	
MOV BX, AX	
MOV [BX], DX	
POP DX	
POP AX	
POP CX	
POP BX	
RET	



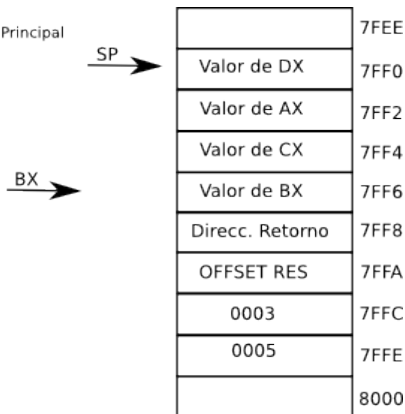
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      POP DX
      POP AX
      POP CX
      POP BX
      RET

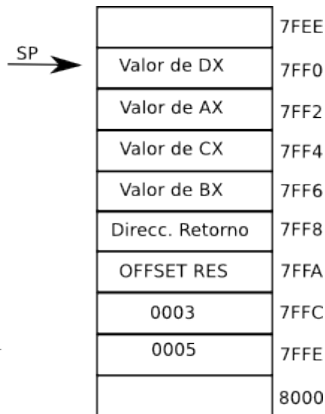
ORG 2000H ; Programa Principal
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PUSH AX
MOV AX, NUM2
PUSH AX
MOV AX, OFFSET RES
PUSH AX
MOV DX, 0
CALL MUL
POP AX
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HLT
END
  
```



	7FEE
Valor de DX	7FF0
Valor de AX	7FF2
Valor de CX	7FF4
Valor de BX	7FF6
Direcc. Retorno	7FF8
OFFSET RES	7FFA
0003	7FFC
0005	7FFE
	8000

Subrutinas

ORG 3000H ; Subrutina MUL	ORG 2000H ; Programa Principal
MUL: PUSH BX	MOV AX, NUM1
MOV BX, SP	PUSH AX
PUSH CX	MOV AX, NUM2
PUSH AX	PUSH AX
PUSH DX	MOV AX, OFFSET RES
ADD BX, 6	PUSH AX
MOV CX, [BX]	MOV DX, 0
ADD BX, 2	CALL MUL
MOV AX, [BX]	POP AX
SUMA: ADD DX, AX	POP AX
DEC CX	POP AX
JNZ SUMA	HLT
SUB BX, 4	END
MOV AX, [BX]	
MOV BX, AX	
MOV [BX], DX	
POP DX	
POP AX	
POP CX	
POP BX	
RET	

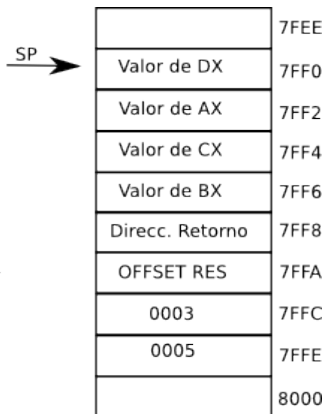


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    POP AX
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POP AX
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HLT
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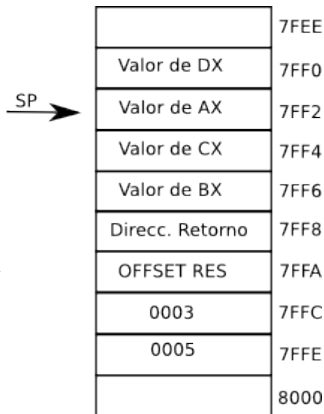


Subrutinas

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ORG 3000H ; Subrutina MUL      ORG 2000H ; Programa Principal
MUL: PUSH  BX                   MOV  AX, NUM1
    MOV  BX, SP                 PUSH  AX
    PUSH CX                    MOV  AX, NUM2
    PUSH AX                    PUSH  AX
    PUSH DX                    MOV  AX, OFFSET RES
    ADD  BX, 6                 PUSH  AX
    MOV  CX, [BX]              MOV  DX, 0
    ADD  BX, 2                 CALL  MUL
    MOV  AX, [BX]              POP   AX
SUMA: ADD  DX, AX               POP   AX
    DEC  CX                    POP   AX
    JNZ  SUMA                  HLT
    SUB  BX, 4                 END
    MOV  AX, [BX]
    MOV  BX, AX
    MOV  [BX], DX
    POP  DX
    POP  AX
    POP  CX
    POP  BX
    RET

```



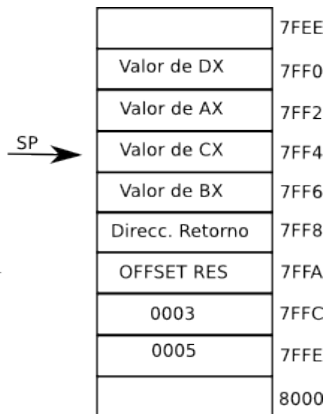
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      POP DX
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      POP CX
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BX →

SP →

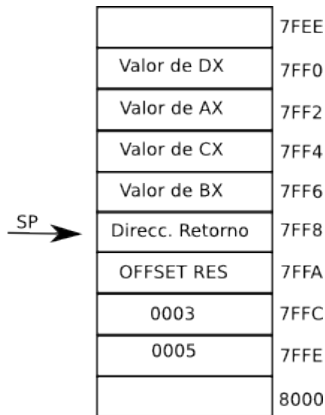
	7FEE
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Valor de BX	7FF6
Direcc. Retorno	7FF8
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BX →

SP →

BX 

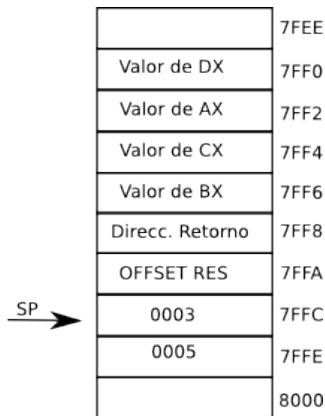
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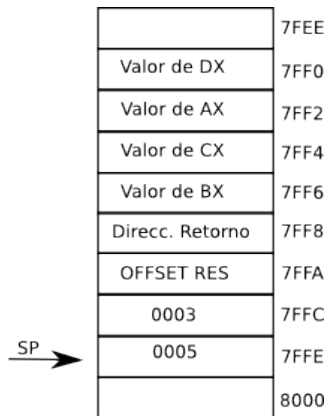


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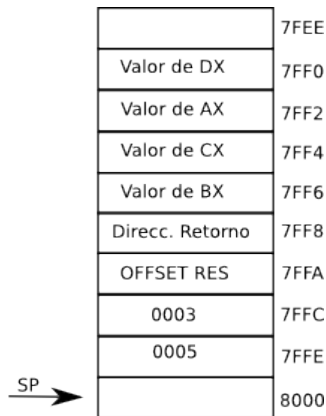


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