

```
; Q 6> Given a 16bit number determine all its factors from
; 0 to 9
SW      2000h
        [2000h]    =    00D2h      ; A = 210
        [2002h]    =    2004h      ; Address to Factors Array F[]
        .
```

A

```
1000h
mov     cx, 0000h
mov     bx, 0001h
mov     di, [2002h]
add     di, 0002h
loop_label:
mov     dx, 0000h
mov     ax, [2000h]
div     bx
or      dx, dx
jnz     not_factor
inc     cx
mov     [di], bx
add     di, 0002h
not_factor:
inc     bx
cmp     bx, 0009h
jbe     loop_label
mov     di, [2002h]
mov     [di], cx
hlt
        .
```

```
GO      1000h
INT                                           ;(try '.' here)
```

```
SW      2004h                                ; ans = 0006h => F.length = 6
SW      2006h                                ; ans = 0001h => 1
SW      2008h                                ; ans = 0002h => 2
SW      200Ah                                ; ans = 0003h => 3
SW      200Ch                                ; ans = 0005h => 5
SW      200Eh                                ; ans = 0006h => 6
SW      2010h                                ; ans = 0007h => 7
        .
```