TITLE / TITRE: Fibonacci (version 3)

Calculate the nth Fibonacci number (stored at address 0F20)
(n is limited to 36 because three 8-bit memory registers are limited to FFFFFF)

1) Input :
input of rank nn at address 0F20 (in hex)

2) Launch :
[Abort]0F2B[GO]

3) Result :
[Abort]0F21[Term]xx[MEM]xx[MEM]xx display the result (in hex)

```
0f2b          .OR 0xf2B

0f20   Nbr    .eq 0x0f20
0f21   nb1a   .eq 0x0f21
0f22   nb1b   .eq 0x0f22
0f23   nb1c   .eq 0x0f23
0f24   nb2a   .eq 0x0f24
0f25   nb2b   .eq 0x0f25
0f26   nb2c   .eq 0x0f26
0f27   nb3a   .eq 0x0f27
0f28   nb3b   .eq 0x0f28
0f29   nb3c   .eq 0x0f29
0f2a   Decr   .eq 0x0f2a

0f2b        FIB3:
0f2b c4 01     LDI 1
0f2d c8 f5     ST nb1c
0f2f c4 00     LDI 0
0f31 c8 f0     ST nb1b
0f33 c8 ed     ST nb1a
0f35 c8 f0     ST nb2c
0f37 c8 ed     ST nb2b
```

```
0f39 c8 ea     ST nb2a
0f3b c0 e4     LD Nbr
0f3d c8 ec     ST Decr
0f3f b8 ea     DLD Decr
0f41        LBL:
0f41 02        CCL
0f42 c0 e0     LD nb1c
0f44 f0 e1     ADD nb2c
0f46 c8 df     ST nb2c
0f48 c0 d9     LD nb1b
0f4a f0 da     ADD nb2b
0f4c c8 d8     ST nb2b
0f4e c0 d2     LD nb1a
0f50 f0 d3     ADD nb2a
0f52 c8 d1     ST nb2a
0f54 c0 d1     LD nb2c
0f56 c8 d2     ST nb3c
0f58 c0 cc     LD nb2b
0f5a c8 cd     ST nb3b
0f5c c0 c7     LD nb2a
0f5e c8 c8     ST nb3a
0f60 c0 c2     LD nb1c
```

```
0f62 c8 c3     ST nb2c
0f64 c0 bd     LD nb1b
0f66 c8 be     ST nb2b
0f68 c0 b8     LD nb1a
0f6a c8 b9     ST nb2a
0f6c c0 bc     LD nb3c
0f6e c8 b4     ST nb1c
0f70 c0 b7     LD nb3b
0f72 c8 af     ST nb1b
0f74 c0 b2     LD nb3a
0f76 c8 aa     ST nb1a
0f78 b8 b1     DLD Decr
0f7a 9c c5     JNZ LBL
0f7c c4 00     LDI 0
0f7e c8 a7     ST nb2c
0f80 c8 a4     ST nb2b
0f82 c8 a1     ST nb2a
0f84 c8 a4     ST nb3c
0f86 c8 a1     ST nb3b
0f88 c8 9e     ST nb3a
0f8a 3f        XPPC 3
```

```
:100F2000000000000000000000000C401C8F5C47B
:100F300000C8F0C8EDC8F0C8EDC8EAC0E4C8ECB815
:100F4000EA02C0E0F0E1C8DFC0D9F0DAC8D8C0D208
:100F5000F0D3C8D1C0D1C8D2C0CCC8CDC0C7C8C8D2
:100F6000C0C2C8C3C0BDC8BEC0B8C8B9C0BCC8B480
:100F7000C0B7C8AFC0B2C8AAB8B19CC5C400C8A7A2
:100F8000C8A4C8A1C8A4C8A1C89E3F000000000012
:00000001FF
```