TITLE / TITRE: Fibonacci (version 2)

Calculate the nth Fibonacci number (stored at address 0F20)
(n is limited to 24 because two 8-bit memory registers are limited to FFFF)

1) Input :
input of rank nn at address 0F20 (in hex)
[Abort]0F20[Term]nn[MEM]

2) Launch :
[Abort]0F28[GO]

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

```
0f28            .OR 0x0f28
 0f20    Nbr    .eq 0x0f20
 0f21    nb1a   .eq 0x0f21
 0f22    nb1b   .eq 0x0f22
 0f23    nb2a   .eq 0x0f23
 0f24    nb2b   .eq 0x0f24
 0f25    nb3a   .eq 0x0f25
 0f26    nb3b   .eq 0x0f26
 0f27    Decr   .eq 0x0f27

0f28          FIB2:
0f28 c4 01      LDI 1
0f2a c8 f7      ST nb1b
0f2c c4 00      LDI 0
0f2e c8 f2      ST nb1a
0f30 c8 f3      ST nb2b
0f32 c8 f0      ST nb2a
0f34 c0 eb      LD Nbr
0f36 c8 f0      ST Decr
0f38 b8 ee      DLD Decr
0f3a          LBL:
0f3a 02         CCL
0f3b c0 e6      LD nb1b
0f3d f0 e6      ADD nb2b
```

```
0f3f c8 e4      ST nb2b
0f41 c0 df      LD nb1a
0f43 f0 df      ADD nb2a
0f45 c8 dd      ST nb2a
0f47 c0 dc      LD nb2b
0f49 c8 dc      ST nb3b
0f4b c0 d7      LD nb2a
0f4d c8 d7      ST nb3a
0f4f c0 d2      LD nb1b
0f51 c8 d2      ST nb2b
0f53 c0 cd      LD nb1a
0f55 c8 cd      ST nb2a
0f57 c0 ce      LD nb3b
0f59 c8 c8      ST nb1b
0f5b c0 c9      LD nb3a
0f5d c8 c3      ST nb1a
0f5f b8 c7      DLD Decr
0f61 9c d7      JNZ LBL
0f63 c4 00      LDI 0
0f65 c8 be      ST nb2b
0f67 c8 bb      ST nb2a
0f69 c8 bc      ST nb3b
0f6b c8 b9      ST nb3a
0f6d 3f          XPPC 3
```

```
:100F2000000000000000000000C401C8F7C400C8F2BF
:100F3000C8F3C8F0C0EBC8F0B8EE02C0E6F0E6C8EF
:100F4000E4C0DFF0DFC8DDC0DCC8DCC0D7C8D7C074
:100F5000D2C8D2C0CDC8CDC0CEC8C8C0C9C8C3B819
:100F6000C79CD7C400C8BEC8BBC8BCC8B93F000036
:00000001FF
```