



Calculates the factorial of n (n stored in register 0f20)
Limited to 8! Result is **16 bits**, therefore a maximum of FFFF. (65535 in **decimal**)

Example : 8!

- 1) Input 8 at address **0f20** : [Abort]0F20[Term]08[Mem]
 2) Launch the program : [Abort]0F27[G0]
 3) Result at addresses **0f25** and **0f26** : [Abort]0F24[Term] ... [Mem]
 display : 9d80 (40320 in **decimal**)

```

0f27      .OR      0xf27
0f20      Nbr      .eq 0xf20
0f21      Mul      .eq 0xf21
0f22      Cpt      .eq 0xf22
0f23      Nbr1H    .eq 0xf23
0f24      Nbr1L    .eq 0xf24
0f25      Nbr2H    .eq 0xf25
0f26      Nbr2L    .eq 0xf26

0f27      FAC:
0f27 c0 f8      LD Nbr
0f29 c8 f7      ST Mul
0f2b c8 fa      ST Nbr2L
0f2d c4 00      LDI 0
0f2f c8 f3      ST Nbr1H
0f31 c8 f3      ST Nbr2H
0f33 c8 f0      ST Nbr1L
0f35 90 0e      JMP BC1
0f37      BC0:
0f37 c0 eb      LD Nbr1H
0f39 c8 eb      ST Nbr2H
0f3b c0 e8      LD Nbr1L
0f3d c8 e8      ST Nbr2L
0f3f c4 00      LDI 0
0f41 c8 e1      ST Nbr1H
0f43 c8 e0      ST Nbr1L
  
```

```

0f45      BC1:
0f45 c0 db      LD Mul
0f47 03         SCL
0f48 fc 01      CAI 1
0f4a c8 d6      ST Mul
0f4c c8 d5      ST Cpt
0f4e      BC2:
0f4e 02         CCL
0f4f c0 d4      LD Nbr1L
0f51 f0 d4      ADD Nbr2L
0f53 c8 d0      ST Nbr1L
0f55 c0 cd      LD Nbr1H
0f57 f0 cd      ADD Nbr2H
0f59 c8 c9      ST Nbr1H
0f5b b8 c6      DLD Cpt
0f5d 9c ef      JNZ BC2
0f5f b8 c0      DLD Nbr
0f61 9c d4      JNZ BC0
0f63 3f         XPPC 3
  
```

```

:100F200000000000000000000000000000C0F8C8F7C8FAC400C8FC
:100F3000F3C8F3C8F0900EC0EBC8EBC0E8C8E8C433
:100F400000C8E1C8E0C0DB03FC01C8D6C8D502C0B8
:100F5000D4F0D4C8D0C0CDF0CDC8C9B8C69CEFB8C5
:100F6000C09CD43F000000000000000000000000000012
:000000001FF
  
```