

```

LOOP2    ADD      R3, R1, R2
         BRn      CONT
         AND      R1, R1, #0
         ADD      R1, R2, #0
         AND      R2, R2, #0
         ADD      R2, R3, #0
         ADD      R4, R4, #1
         BR       LOOP2
CONT     STI      R4, N

         ADD      R0, R4, #0
         ADD      R0, R0, #-2
         AND      R4, R4, #0
         ADD      R4, R4, #-1

         AND      R1, R1, #0
         ADD      R1, R1, #1
         AND      R2, R2, #0
         ADD      R2, R2, #1
         AND      R3, R3, #0
LOOP3    ADD      R0, R0, #0
         BRz      ZERO2
         ADD      R3, R1, R2
         AND      R1, R1, #0
         ADD      R1, R2, #0
         AND      R2, R2, #0
         ADD      R2, R3, #0
         ADD      R0, R0, R4
         BR       LOOP3
ZERO2    STI      R3, F_N

```

*should combine
into one loop -1*

```

X        .FILL    x3100
F_n      .FILL    x3101
N        .FILL    x3102
F_N      .FILL    x3103
         .END

```