EOR r2, r2, r2

MOV r3, #4

loop1:

MOV r2, r2, LSL #3

MOV r1, r1, ROR #2

ORR r2, r2, r1, LSR #30

SUBS r3, r3, #1

BNE loop1

MOV r3, #4

loop2:

MOV r2, r2, LSL #3

ORR r2, r2, r1, LSR #30

ORR r2, r2, #4

MOV r1, r1, LSL #2

SUBS r3, r3, #1

BNE loop2

SWI 0x123456