```
1:
add_int PROC
    BICS r12, r2, #3    ;
    BEQ label2          ;
    VDUP.32 q1, r3      ; // q1 = 0x00FF_00FF_00FF_00FF
    LSRS r2, r2, #2     ; // r2>>2 -> r2 = 0x0000_0002
    BEQ label2          ; //
_____________________________
2:
label1
    VLD1.32 {d0,d1}, [r1]! ; // r1 = 0x1000_1040 -> 10001040~1000104C 가져옴
                           ; // r1 = 0x1000_1050, q0 = 0
    VADD.I32 q0, q0, q1    ; // q0 = 0x00FF_00FF_00FF_00FF
    SUBS r2, r2, #1        ; // r2-=1
    VST1.32 {d0,d1}, [r0]! ; // 1010~101C 저장, r0 = 0x1000_1020
    BNE label1             ; //
_____________________________
3.
label2
    BX lr
    END


1(init) :
    register                                    memory
r0 [0x1000_1000]                              전부 0으로 초기화
r1 [0x1000_1040]
r2 [0x0000_0008] <---- 반복횟수 결정
r3 [0x0000_00FF]
q0 [0x00FF_00FF_00FF_00FF]
q1 [0xXXXX_XXXX_XXXX_XXXX]


2-before :
    register                                    memory
r0 [0x1000_1000]                              전부 0으로 초기화
r1 [0x1000_1040]
r2 [0x0000_0002] <---- 반복횟수 결정
r3 [0x0000_00FF]
q0 [0x00FF_00FF_00FF_00FF]
q1 [0xXXXX_XXXX_XXXX_XXXX]


2-1st loop :
    register                                    memory
r0 [0x1000_1010]                              A [0X00FF]
r1 [0x1000_1050]                              B [0X00FF]
r2 [0x0000_0001] <---- 반복횟수 결정          C [0x00FF]
r3 [0x0000_00FF]                              D [0X00FF]
q0 [0x00FF_00FF_00FF_00FF]                    E [0X0000]
q1 [0x00FF_00FF_00FF_00FF]                    F [0X0000]
                                              G [0X0000]
```

```
                                                    H [0X0000]
                                                    I [0X0000]
                                                    J [0X0000]

2-2nd loop :
    register                                          memory
r0 [0x1000_1020]                                    A [0X00FF]
r1 [0x1000_1050]                                    B [0X00FF]
r2 [0x0000_0001] <---- 반복횟수 결정                C [0x00FF]
r3 [0x0000_00FF]                                    D [0X00FF]
q0 [0x00FF_00FF_00FF_00FF]                          E [0X00FF]
q1 [0x00FF_00FF_00FF_00FF]                          F [0X00FF]
                                                    G [0X00FF]
                                                    H [0X00FF]
                                                    I [0X0000]
                                                    J [0X0000]
```

```
add_int PROC
     BICS r12, r2, #3
     BEQ label2
     VDUP.32 q1, r3
     LSRS r2, r2, #2
     BEQ label2
label1
     VLD1.32 {d0,d1}, [r1]!
     VADD.I32 q0, q0, q1
     SUBS r2, r2, #1
     VST1.32 {d0,d1}, [r0]!
     BNE label1
label2
     BX lr
     ENDP


1(init) :
    register                                          memory
r0 [0x1000_1000]                                    전부 0으로 초기화
r1 [0x1000_1010]
r2 [0x0000_0006] = 0110
r3 [0x0000_00FF]
q0 [0x00FF_00FF_00FF_00FF]
q1 [0xXXXX_XXXX_XXXX_XXXX]


2-before :
    register                                          memory
r0 [0x1000_1000]                                    전부 0으로 초기화
r1 [0x1000_1040]
r2 [0x0000_0001]
r3 [0x0000_00FF]
q0 [0x00FF_00FF_00FF_00FF]
```

```
q1 [0xXXXX_XXXX_XXXX_XXXX]


2-1st loop :
    register                                    memory
r0 [0x1000_1010]                              A [0X00FF]
r1 [0x1000_1050]                              B [0X00FF]
r2 [0x0000_0000] <---- 반복횟수 결정           C [0x00FF]
r3 [0x0000_00FF]                              D [0X00FF]
q0 [0x00FF_00FF_00FF_00FF]                    E [0X0000]
q1 [0x00FF_00FF_00FF_00FF]                    F [0X0000]
                                              G [0X0000]
                                              H [0X0000]
                                              I [0X0000]
                                              J [0X0000]
```