MOV A, #7 ; generate value for A

MOV B, #5 ; generate value for B

MOV C, #2 ; generate value for C

MOV D, #4 ; generate value for D

MOV r0, D ; generate value for dPtr

ADR r4, dPtr ; get address for dPtr

SUB r5, A, B ; compute A – B

CMP r5, #3 ; compare (A-B) > 3

BGT fblock ; if (A-B) <= 3, branch to false block

; true block

MOV r1, #6 ; generate value for C

ADR r4, C ; get address for C

STR r1, [r4] ; store C

ADR r4, D ; get address for D

LDR r2, [r4] ; get value of D

MOV r2, r2, LSL#2 ; perform shift

B after ; branch around false block

; false block

Fblock ADR r1, C ; get address for C

LDR r1, [r4] ; get value of C

MOV r1, r1, LSL#5 ; perform shift

MOV r0, #7 ; generate value for dPtr

ADR r4, dPtr ; get address for dPtr

STR r0, [r4] ; store dPtr

after …