MOV R0, #7 ; generate value for A

MOV R1, #5 ; generate value for B

MOV R2, #2 ; generate value for C

MOV R3, #4 ; generate value for D

LDR R4, [R3] ; get address for dPtr

SUB R5, R0, R1 ; compute A – B

CMP R5, #3 ; compare (A-B) > 3

BGT TRUE ; branch to true when (A-B) > 3;

MOV R2, R2, LSL #5 ; perform shift for C (false)

MOV R4, #7 ; generate value for \*dPtr (false)

B DONE ; branch to done

TRUE: MOV R2, #6 ; generate value for C(true)

MOV R3, R3, LSL #2 ; perform shift for D (true)

DONE: