

## 2A) ONE MEM-MEM USING ADR MODES

```
        AREA DATATRANSFER, CODE, READONLY
ENTRY
        EXPORT START
START
        LDR R0, =0x20000000
        LDR R1, =0x20000016
        LDR R2, =0x20000042
        LDRH R4, [R2]
UP      LDRB R3, [R0]
        STRB R3, [R1]
        ADD R0, R0, #1
        ADD R1, R1, #1
        ADD R3, R3, #1
        STRB R3, [R0]
        ADD R4, R4, #-1
        CMP R4, #0
        BEQ NEXT
        B UP
NEXT    LDR R5, =0x12345678
        STRB R5, [R1]
        STRH R5, [R1, #1]
        STR R5, [R1, #4]
STOP   B STOP
        END
```

## 2B) DATA EXCH BETWEEN MEM

```
        AREA WORD, CODE, READONLY
NUM EQU 8
        EXPORT START
START
        LDR R0, =0x20000000
        LDR R1, =0x2000002C
        MOV R2, #NUM
        MOV R5, #0
WORDCOPY
        LDR R3, [R0, R5]
        LDR R4, [R1, R5]
        STR R3, [R1, R5]
        STR R4, [R0, R5]
        SUBS R2, R2, #4
        ADD R5, R5, #4
        BNE WORDCOPY
STOP   B STOP
        END
```