

7A) IF 32BIT FOUND DISP FFFFFFFF IN R0

```
AREA DATA1, DATA, READONLY
ARRAY DCD 0X08F, 0X012, 0X55, 0X03, 0X088
AREA DATA2, DATA, READONLY
KEY DCD 0X088
LEN EQU 05
AREA PROGRAM, CODE, READONLY
ENTRY
EXPORT START
START
LDR R0, =ARRAY
LDR R2, =LEN
LDR R3, =KEY
LDR R4, [R3]
LOOP
LDR R5, [R0]
CMP R4, R5
BEQ FOUND
ADD R0, R0, #4
SUBS R2, R2, #0X1
BNE LOOP
MOV R0, #0
B STOP
FOUND MOV R0, #0xFFFFFFFF
STOP B STOP
END
```

7B) LARGEST/SMALLEST FROM ARR OF 5 NUM

```
        AREA SRC, DATA, READONLY
        DCD 0x0000008F, 0x00000012, 0x00000024, 0x00000023, 0x00000011
        ALIGN
        AREA DST, DATA, READWRITE
        SPACE 02
LEN EQU 05
        AREA PROGRAM, CODE, READONLY
ENTRY
EXPORT START
START
        LDR R6, =LEN
        LDR R0, =SRC
        SUB R6, R6, #01
        LDR R7, [R0], #04
TOP
        LDR R8, [R0], #04
        CMP R8, R7
        MOVGE R7, R8
        SUB R6, R6, #1
        CMP R6, #00
        BNE TOP
        LDR R0, =DST
        STR R7, [R0]
STOP B STOP
END
```

7C) LARGEST/SMALLEST IN GIVEN ARR

```
        AREA LIST, DATA, READONLY
        DCD 0x0000008F, 0x00000012, 0x00000024, 0x00000023, 0x00000011
        ALIGN
        AREA DST, DATA, READWRITE
        SPACE 10
LEN EQU 05
```

```

        AREA PROGRAM, CODE, READONLY
ENTRY
        EXPORT START
START   LDR R0,=LEN
        LDR R5,=LIST
        LDR R6,=DST
UP      LDR R1,[R5]
        STR R1,[R6]
        ADD R5,#04
        ADD R6,#04
        SUB R0,#1
        CMP R0,#00
        BNE UP
        LDR R0,=LEN
TOP2    LDR R6,=DST
        LDR R1,=LEN
        SUB R1,#1
TOP     LDR R2,[R6]
        ADD R6,#4
        LDR R3,[R6]
        CMP R2,R3 ;
        BLE DN
        STR R2,[R6]
        SUB R6,#4
        STR R3,[R6]
        ADD R6,#4
DN      SUB R1,#01
        CMP R1,#00
        BLE DN1
        B TOP
DN1     SUB R0,#1
        CMP R0,#00
        BLE DN2
        B TOP2
DN2     B DN2
        END

```