

```
if ( a<b)
{
    x=5
    y=c+d
}
else
    y=c-d
```

**Code-1:**

```
        AREA RESET, CODE, READONLY
        ENTRY
START
        ADR R4, SRC
        LDR R5, =DST
        BL SUB1
STOP    B STOP
SUB1    LDR R0, [R4], #4
        LDR R1, [R4], #4
        CMP R0, R1
        BGE    FB1
        LDR R0, [R4], #4
        LDR R1, [R4], #4
```

```

        ADD R0,R0,R1
        MOV R2,#5
        STR R2,[R5],#4
        STR R0,[R5]
        B AFT
FB1     LDR R0,[R4],#4
        LDR R1,[R4]
        SUB R0,R0,R1
        STR R0,[R5,#4]
AFT     MOV PC,LR
SRC     DCD 0x20, 0x40, 0x30, 0x10
        AREA RESULT, DATA, READWRITE
DST     DCD 0, 0
        END

```

## Code-2:

```

        AREA RESET, CODE, READONLY
        ENTRY
START
        ADR R4,SRC
        LDR R5,=DST
        BL SUB1
STOP    B STOP
SUB1    LDR R0,[R4],#4
        LDR R1,[R4],#4
        CMP R0,R1
        LDR R0,[R4],#4
        LDR R1,[R4]
        MOVL R2,#5
        STRLT R2,[R5]
        ADDLT R0, R0, R1
        SUBGE R0, R0, R1
        STR R0,[R5,#4]

AFT     MOV PC,LR
SRC     DCD 0x20, 0x40, 0x30, 0x10
        AREA RESULT, DATA, READWRITE
DST     DCD 0, 0
        END

```