## D:\OKUL\ee 4\u00e4n 1\u00e447\LabFour\QuestionFive\my\_ST\_ISR.s

```
PB OUT
                          EQU 0x4000503C
 1
 2
                          AREA
                                       main, READONLY, CODE
 3
                          THUMB
 4
                          EXPORT
                                      my_ST_ISR
 5
     ;This script is called when sysTimer is triggered
 6
     ; According to value in R10, it will be determined which rotation will be occured,
     ;CounterClockWise(cCW)
                                  ClockWise(cW)
 7
 8
     ;R10 value is changing in main function
     my_ST_ISR
 9
                          PROC
10
                                       R5, = PB OUT
                          LDR
11
                          STR
                                       R9, [R5]
                                                    ;Write values in IN1-4
                                       R10,#0x02
12
                          CMP
                                                    ; Deciding which rotation
13
                          BEQ
                                       cCW
14
                          CMP
                                       R10,#0x01
15
                          BEQ
                                       cW
16
                          ВХ
                                       LR
17
18
     cW
                          LSR
                                       R9,#1
                                                    ;Out1-4 changing as desired in manual
19
                          CMP
                                       R9,#0x00
                                                    ; Checking boundaries
20
                          MOVEQ
                                       R9,#0x08
21
                          BX
                                       LR
22
23
     cCW
                                       R9,#1
                          LSL
                                                    ;Out1-4 changing as desired in manual
24
                          CMP
                                       R9, #0x10
                                                   ; Checking boundaries
25
                          MOVEQ
                                       R9, #0x01
26
                          BX
                                       LR
27
28
                          ALIGN
29
                          ENDP
30
                          END
```