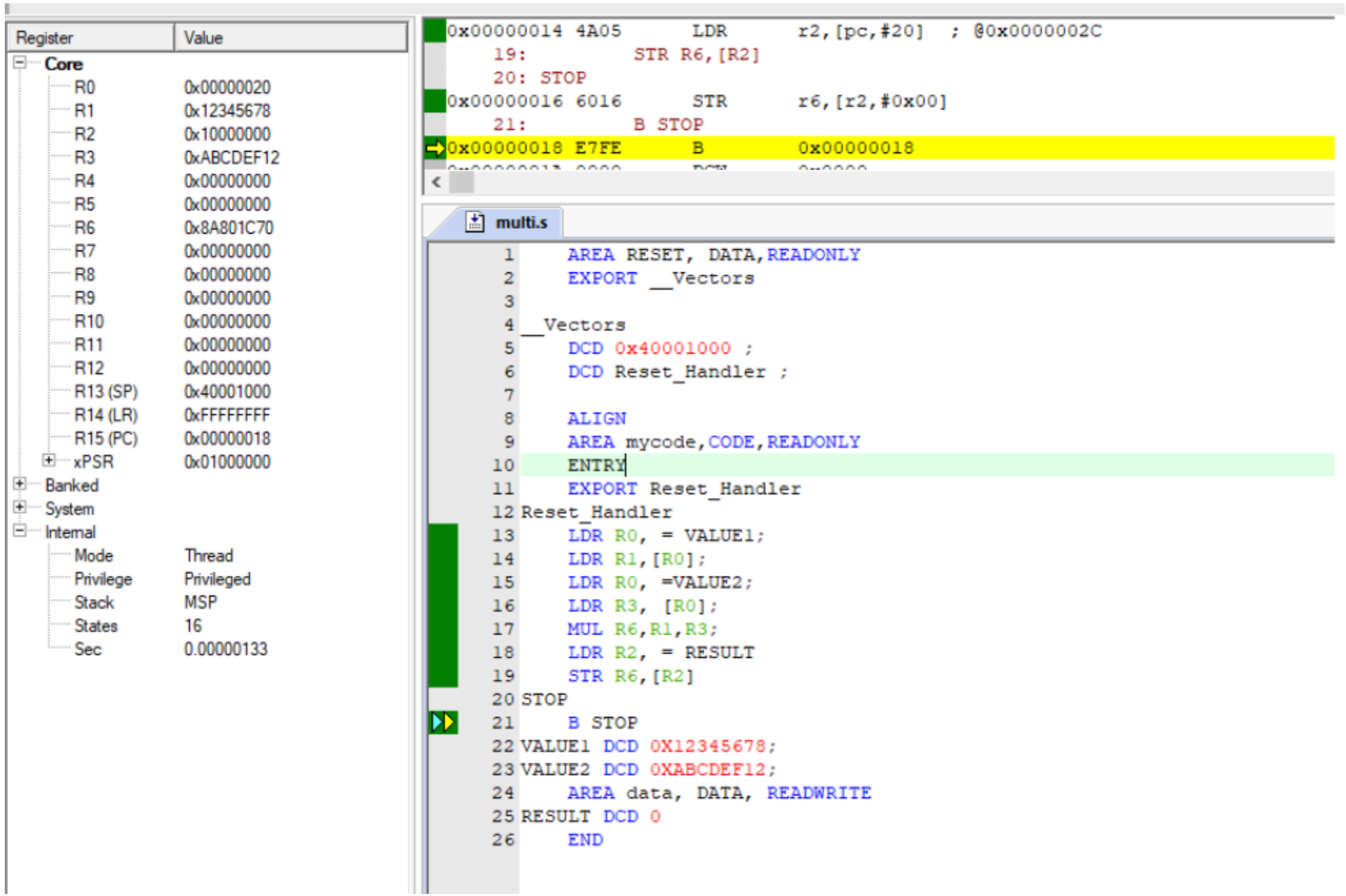
Lab Ex-2

(Software Lab)- Addition/Multiplication/Substraction/Reverse Substraction of two 16 Bit Numbers



Register	Value
Core	
R0	0x00000020
R1	0x12345678
R2	0x10000000
R3	0xABCDEF12
R4	0x00000000
R5	0x00000000
R6	0x8A801C70
R7	0x00000000
R8	0x00000000
R9	0x00000000
R10	0x00000000
R11	0x00000000
R12	0x00000000
R13 (SP)	0x40001000
R14 (LR)	0xFFFFFFFF
R15 (PC)	0x00000018
xPSR	0x01000000
Banked	
System	
Internal	
Mode	Thread
Privilege	Privileged
Stack	MSP
States	16
Sec	0.00000133

```
0x00000014 4A05      LDR      r2,[pc,#20]  ; @0x0000002C
    19:          STR R6,[R2]
    20: STOP
0x00000016 6016      STR      r6,[r2,#0x00]
    21:          B STOP
0x00000018 E7FE      B        0x00000018
```

multi.s

```
 1     AREA RESET, DATA,READONLY
 2     EXPORT __Vectors
 3
 4 __Vectors
 5     DCD 0x40001000 ;
 6     DCD Reset_Handler ;
 7
 8     ALIGN
 9     AREA mycode,CODE,READONLY
10     ENTRY
11     EXPORT Reset_Handler
12 Reset_Handler
13     LDR R0, = VALUE1;
14     LDR R1,[R0];
15     LDR R0, =VALUE2;
16     LDR R3, [R0];
17     MUL R6,R1,R3;
18     LDR R2, = RESULT
19     STR R6,[R2]
20 STOP
21     B STOP
22 VALUE1 DCD 0X12345678;
23 VALUE2 DCD 0XABCDEF12;
24     AREA data, DATA, READWRITE
25 RESULT DCD 0
26     END
```