ECE 322 EMBEDDED SYSTEM

Lab :- 6

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Roll N:- 2021BEC0035 **DATE : 13/02/2024**

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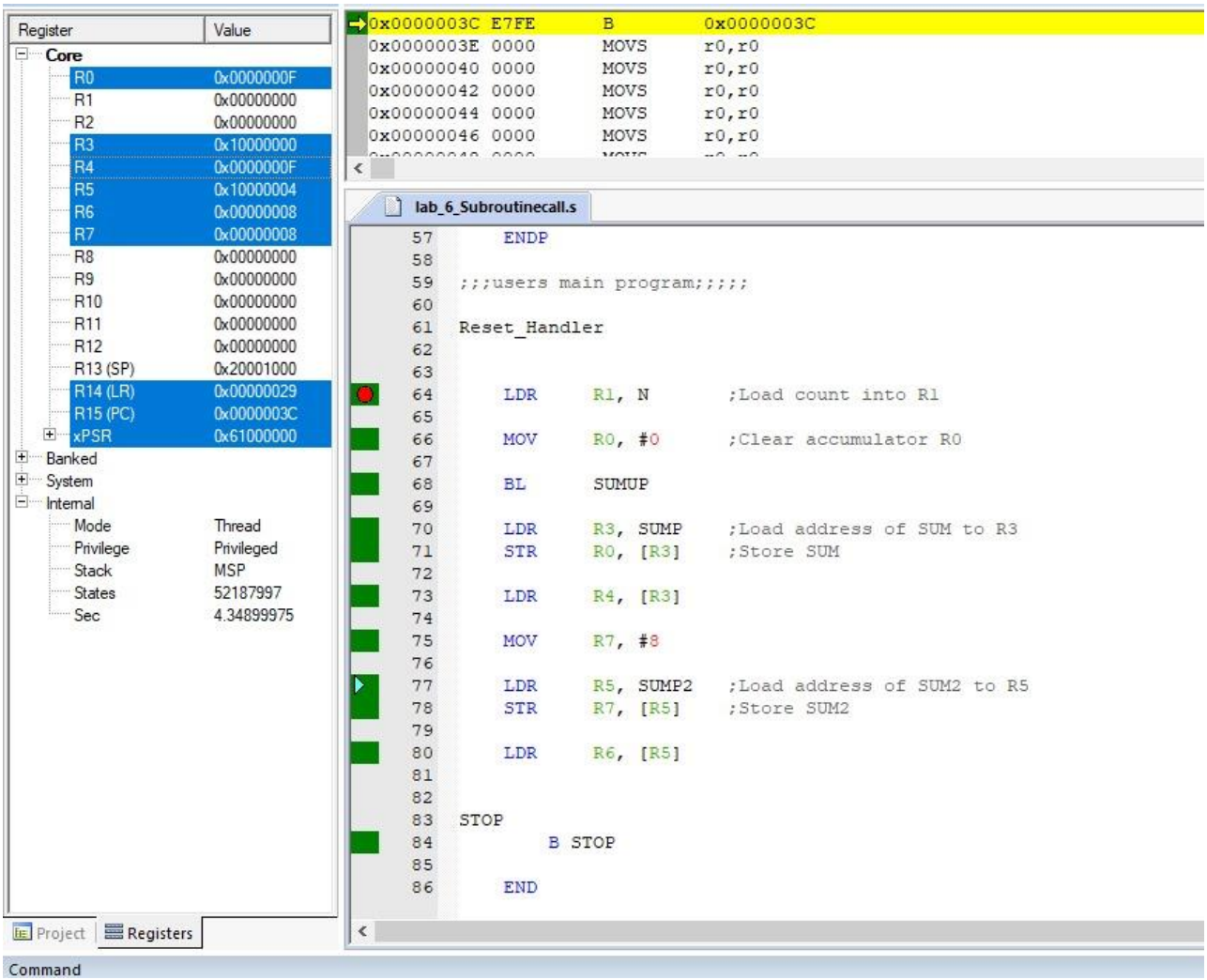
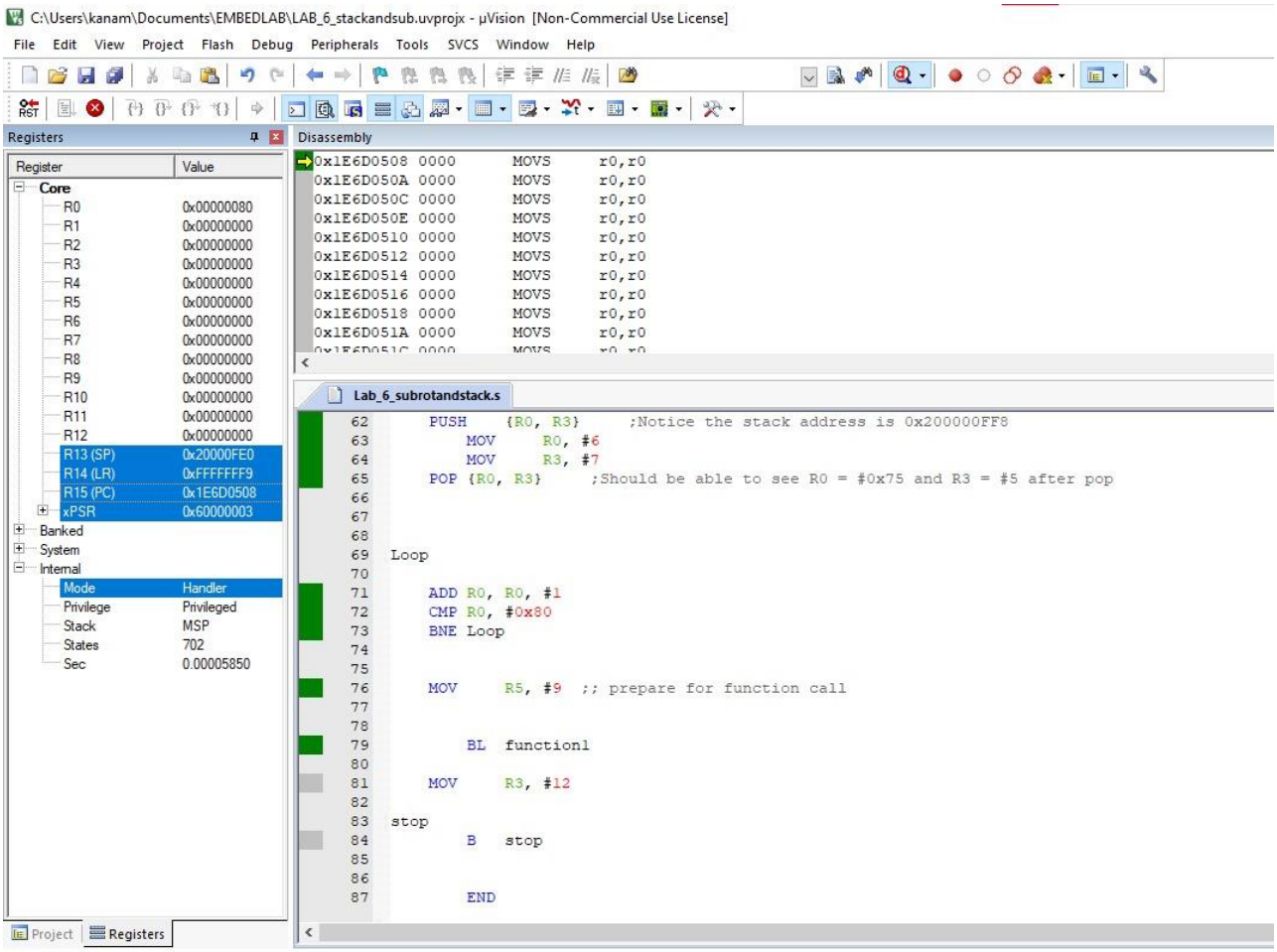
Code:




C:\Users\kanam\Documents\EMBEDLAB\LAB_6_stackandsub.uvprojx - µVision [Non-Commercial Use License]
File Edit View Project Flash Debug Peripherals Tools SVCS Window Help
Registers
Register Value
Core
R0 0x00000080
R1 0x00000000
R2 0x00000000
R3 0x00000000
R4 0x00000000
R5 0x00000000
R6 0x00000000
R7 0x00000000
R8 0x00000000
R9 0x00000000
R10 0x00000000
R11 0x00000000
R12 0x00000000
R13 (SP) 0x20000FE0
R14 (LR) 0xFFFFFFF9
R15 (PC) 0x1E6D0508
xPSR 0x60000003
Banked
System
Internal
Mode Handler
Privilege Privileged
Stack MSP
States 702
Sec 0.00005850
Project
Registers
Disassembly
0x1E6D0508 0000 MOVS r0,r0
0x1E6D050A 0000 MOVS r0,r0
0x1E6D050C 0000 MOVS r0,r0
0x1E6D050E 0000 MOVS r0,r0
0x1E6D0510 0000 MOVS r0,r0
0x1E6D0512 0000 MOVS r0,r0
0x1E6D0514 0000 MOVS r0,r0
0x1E6D0516 0000 MOVS r0,r0
0x1E6D0518 0000 MOVS r0,r0
0x1E6D051A 0000 MOVS r0,r0
Lab_6_subrotandstack.s
62 PUSH {R0, R3} ;Notice the stack address is 0x200000FF8
63 MOV R0, #6
64 MOV R3, #7
65 POP {R0, R3} ;Should be able to see R0 = #0x75 and R3 = #5 after pop
66
67
68
69 Loop
70
71 ADD R0, R0, #1
72 CMP R0, #0x80
73 BNE Loop
74
75
76 MOV R5, #9 ;; prepare for function call
77
78
79 BL function1
80
81 MOV R3, #12
82
83 stop
84 B stop
85
86
87 END