Code:

BL Subroutine1 -> move R14 R15   
 Link PC

Push {R1}  
Push {R14}  
mov R0 #2  
ADD R3 R0 #1  
POP {R1}  
POP {R14}  
BX R14

Computer architecture

Arm M3 architecture and features

Arm v7 and thumb ISA

C and ASM

B-B

Interrupt handling

Subroutine switches

Scheduling (FCFS, RR, Pre-emptive)

RTOS