

## 학번: 201704150 / 이름: 허강준

## 과제 1

## Lab 2-1.s

```

;학번: 201704150 ; 이름: 허강준

MOV    R0, #0x5          ; R0 = 0x5
MOV    R1, #25           ; R1 = 25
MOV    R3, #2            ; R3 = 2

ADD    R4, R0, R1        ; R4 = R0 + R1
MOV    R5, R4, LSR R3    ; R5 = R4 >> R3

B      .                ; Exec done, wait forever

```

## 실행결과

```

Core
├── R0      0x00000005
├── R1      0x00000019
├── R2      0x00000000
├── R3      0x00000002
├── R4      0x0000001E
├── R5      0x00000007
├── R6      0x00000000
├── R7      0x00000000
├── R8      0x00000000
├── R9      0x00000000
├── R10     0x00000000
├── R11     0x00000000
├── R12     0x00000000
├── R13 (SP) 0x20000200
├── R14 (LR) 0xFFFFFFFF
├── R15 (PC) 0x000000DA
├── xPSR    0x01000000
├── Banked
├── System
├── Internal
│   ├── Mode      Thread
│   ├── Privilege  Privileged
│   ├── Stack      MSP
│   ├── States     31
│   └── Sec        0,00000258

```

## 과제 2

## Lab 2-2.s

```

;학번: 201704150 ; 이름: 허강준

EOR R0, R0          ; R0 ^= R0 (Used for loop ctr)
EOR R1, R1          ; R1 ^= R1

LOOP_BEGIN          CMP R0, #10          ; Compare R0 with 10
                   BGE LOOP_END          ; Branch to LOOP_END

                   ADD R1, R0            ; Add ctr to R1

                   ADD R0, #1            ; Increase counter
                   B   LOOP_BEGIN        ; Loop again

LOOP_END            B .                  ;Exec Done, Wait Forever

```

## 실행결과

Core	
R0	0x0000000A
R1	0x0000002D
R2	0x00000000
R3	0x00000000
R4	0x00000000
R5	0x00000000
R6	0x00000000
R7	0x00000000
R8	0x00000000
R9	0x00000000
R10	0x00000000
R11	0x00000000
R12	0x00000000
R13 (SP)	0x20000200
R14 (LR)	0xFFFFFFFF
R15 (PC)	0x000000D4
+ xPSR	0x61000000
+ Banked	
+ System	
- Internal	
Mode	Thread
Privilege	Privileged
Stack	MSP
States	112
Sec	0,00000933

## 과제 3

## Lab 2-3.s

;학번: 201704150 ; 이름: 허강준

MOV R1, #10 ; R1 = 10

MOV R2, #7 ; R2 = 7

MOV R0, #5 ; R0 = 5

MUL R1, R2 ; R1 \*= R2

CMP R0, #5 ; compare R0 and imm 5

ADDNE R1, R0 ; R1 += R0 (Conditional)

SUBNE R1, R2 ; R1 -= R2 (Conditional)

PASS\_ADD B . ; Exec done, wait forever

## 실행결과

Core	
R0	0x00000005
R1	0x00000046
R2	0x00000007
R3	0x00000000
R4	0x00000000
R5	0x00000000
R6	0x00000000
R7	0x00000000
R8	0x00000000
R9	0x00000000
R10	0x00000000
R11	0x00000000
R12	0x00000000
R13 (SP)	0x20000200
R14 (LR)	0xFFFFFFFF
R15 (PC)	0x000000DA
+ xPSR	0x61000000
+ Banked	
+ System	
- Internal	
Mode	Thread
Privilege	Privileged
Stack	MSP
States	11
Sec	0,00000092