Exercise 1: Compute R2 = (10 + 15) - 5

```
.global _start

.text
_start:
   MOV R0, #10       @ Load 10 into R0
   MOV R1, #15       @ Load 15 into R1
   ADD R2, R0, R1    @ R2 = R0 + R1 = 25

   MOV R3, #5        @ Load 5 into R3
   SUB R2, R2, R3    @ R2 = 25 - 5 = 20


exit:
     B exit
```

Exercise 2: Store 100 in memory and load it back

```
.global _start

.data
myVar: .word 100      @ Define variable in memory

.text
_start:
   LDR R0, =myVar    @ R0 = address of myVar
   LDR R1, [R0]      @ R1 = value at myVar (100)

   MOV R2, #50
   STR R2, [R0]      @ Store 50 into myVar


exit:
     B exit
```

Exercise 3 : Calculate R3 = 6 * 7

```
.global _start

.text
_start:
   MOV R0, #6
   MOV R1, #7
   MUL R3, R0, R1    @ R3 = 6 * 7 = 42


exit:
     B exit
```

Exercise 4: Result = (A + B) * C - D, with A=4, B=3, C=2, D=5

```
.global _start

.text
_start:
   MOV R0, #4    @ A
   MOV R1, #3    @ B
   ADD R2, R0, R1    @ R2 = A + B = 7

   MOV R3, #2    @ C
   MUL R4, R2, R3    @ R4 = (A + B) * C = 14

   MOV R5, #5    @ D
   SUB R6, R4, R5    @ R6 = Result = 14 - 5 = 9


exit:
     B exit
```