Lab Guide 8.A

1. **Part 1:** Getting Started with ARM Assembly Language Programming
    1.1. Write an ARM assembly language program that initializes a register with a value of 10 and stores it in memory at address 0x20000000.
    1.2. Write an ARM assembly language program that reads the value stored in memory at address 0x20000000 and stores it in a register.
    1.3. Write an ARM assembly language program that adds two values, 5 and 10, and stores the result in a register.

2. **Part 2:** Using Conditionals in ARM Assembly Language Programming
    2.1. Write an ARM assembly language program that compares two values, 10 and 20, and sets a flag if the first value is greater than the second value. You should use register to store the flag result (either 1 or 0).
    2.2. Write an ARM assembly language program that uses a conditional statement to save that flag value to memory at address 0x30000000

3. **Part 3:** Using Loops in ARM Assembly Language Programming
    3.1. Write an ARM assembly language program that uses a loop to save number from 0 to 9 to the memory array with base address of 0x40000000
    3.2. Write an ARM assembly language program that uses a loop to calculate the sum of numbers from 0 to N, where N is stored in register R1.