.global main

main:

mov r0, #0x9 // Initialize counter to 9 (r0 will store the counter value)

ldr r1, =table // Load the address of the table (r1 will store the table address)

ldr r3, =SSD

loop:

ldr r2, [r1, r0, lsl #2] // Load the value from the table at index r0 (shifted left by 2)

// Here, you can send the value in r2 to the seven-segment display driver

str r2, [r3]

subs r0, r0, #1 // Decrement the counter

bpl loop // If the counter is non-negative, continue looping

.data

.equ SSD,0xff200020

table:

.word 0x06 // 1

.word 0x5B // 2

.word 0x4F // 3

.word 0x66 // 4

.word 0x6D // 5

.word 0x7D // 6

.word 0x07 // 7

.word 0x7F // 8

.word 0x6F // 9