

```
//
// Ezekiel Kim
// Lab 9
// Program to change number from big to little endian
// Ezekiel Kim
// /2023
//
.global _start // Provide program starting address

.data

.text

_start:
    ldr    x0,    =0x123456789ABCDEF0    // Initialize Number

    // Get first byte
    mov    x2,    x0
    lsl    x2,    x2,    #56
    add    x1,    x1,    x2

    // Get second byte
    mov    x2,    x0
    lsr    x2,    x2,    #8
    lsl    x2,    x2,    #56
    lsr    x2,    x2,    #8
    add    x1,    x1,    x2

    // Get third byte
    mov    x2,    x0
    lsr    x2,    x2,    #16
    lsl    x2,    x2,    #56
    lsr    x2,    x2,    #16
    add    x1,    x1,    x2

    // Get fourth byte
    mov    x2,    x0
    lsr    x2,    x2,    #24
    lsl    x2,    x2,    #56
    lsr    x2,    x2,    #24
    add    x1,    x1,    x2

    // Get fifth byte
    mov    x2,    x0
    lsr    x2,    x2,    #32
    lsl    x2,    x2,    #56
    lsr    x2,    x2,    #32
    add    x1,    x1,    x2

    // Get 6th byte
    mov    x2,    x0
    lsr    x2,    x2,    #40
    lsl    x2,    x2,    #56
    lsr    x2,    x2,    #40
    add    x1,    x1,    x2

    // Get 7th byte
    mov    x2,    x0
    lsr    x2,    x2,    #48
    lsl    x2,    x2,    #56
    lsr    x2,    x2,    #48
    add    x1,    x1,    x2

    // Get 8th byte
    mov    x2,    x0
    lsr    x2,    x2,    #56
    lsl    x2,    x2,    #56
    lsr    x2,    x2,    #56
```

```
add    x1,    x1,    x2
```

```
// Setup the parameters to exit the program and then call Linux to do it.  
mov     x0,    #0      // Sets return code to 0  
mov     x8,    #93     // Service command code 93 terminates  
svc     0       // Call linux to terminate the program  
.end
```