

Mar 13, 23 1:06

equals.s

Page 1/1

```

/**
 * equals.s
 */

// *****
// *      string_equals subroutine      *
// * > This routine takes in two string par- *
// * > -ameters in X1 and X2, and returns a *
// * > boolean comparison (case sensitive) *
// * > into X0. It preserves all registers *
// * > except X0.                          *
// *****

.data
    example: .asciz "Example"

.text
.global equals
equals:
    STR X19, [SP, #-16]!
    STP X1, X2, [SP, #-32]!
loop:
    LDRB W0, [X1], #1
    LDRB W19, [X2], #1
    CMP W0, W19
    B.NE false
    CMP W0, #0
    B.NE loop
true:
    MOV X0, #1
    B end
false:
    MOV X0, #0
end:
    LDP X1, X2, [SP], #32
    LDR X19, [SP], #16
    RET

```