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strtwthpos.s

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/**
 * strtwthpos - Returns true if the String begins with str, starting from the sp
 * ecified index "fromIndex".
 *
 * @param x0: Address of the main string to check.
 * @param x1: Address of the substring to check.
 * @param x2: Starting index in the main string.
 * @return x0: 1 if the main string begins with the substring from the specified
 * index, 0 otherwise.
 * Registers used: x0, x1, x2, x3, x4, x5
 * Registers saved: none
 */
.text
.global strtwthpos
strtwthpos:
    str x0, [sp, #-16]!
    str x2, [sp, #-16]!
    mov x3, #0 // Initialize x3 to 0
    loop:
        ldrb w4, [x0, x2] // Load byte from main string
        ldrb w5, [x1, x3] // Load byte from substring
        cmp w5, #0 // If the substring byte is null, return true
        beq end_of_substring
        cmp w4, w5
        b.ne not_equal
        add x3, x3, #1 // Increment substring index
        add x2, x2, #1 // Increment main string index
        b loop
    not_equal:
        mov x0, #0 // Return 0 (false)
        b end
    end_of_substring:
        mov x0, #1 // Return 1 (true)
    end:
        ldr x2, [sp], #16
        ldr x0, [sp], #16
        ret

```