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<pre> /**  * indxofstr - Returns the index of string str <b>in</b> a particular String.  *  * This <b>function</b> searches <b>for</b> the first occurrence of the specified string str <b>i</b> <b>n</b> the target  * string and returns the index of the first occurrence of the string str <b>in</b> the  * target string.  * The search starts from the beginning of the target string. If the string str  * is not found  * <b>in</b> the target string, the <b>function</b> returns -1.  *  * @param x0: Address of the target string to search.  * @param x1: String to find <b>in</b> the target string.  *  * Registers used: x0, x1, x2, x3, x4  * Registers saved: x0, x1  */  .text .global indxofstr indxofstr:     str x0, [sp, #-16]!    // Save the address of the target string on the s     tack     ldrb w3, [x1], #1      // Load the first character of the string to sear     ch and move the pointer      loop:         ldrb w2, [x0], #1    // Load the next character of the target string a         nd move the pointer         cmp w2, #0           // Check if the end of the target string has been         reached         b.eq cherror        // If so, the character to search was not found <b>i</b>         n the target string, so <b>return</b> -1         cmp w2, w3          // Compare the current character of the target st         ring with the first character of the string to search         b.eq chfound        // If they match, start searching <b>for</b> the rest of         the string to search          b loop              // If they don't match, keep searching <b>for</b> the ch         aracter to search <b>in</b> the target string      chfound:         stp x0, x1, [sp, #-16]! // Save the current target string and string to         search pointers on the stack      sloop:         ldrb w2, [x0], #1    // Load the next character of the target string a         nd move the pointer         ldrb w4, [x1], #1    // Load the next character of the string to searc         h and move the pointer         cmp w4, #0           // Check if the end of the string to search has b         een reached         b.eq strfound       // If so, the entire string to search was found <b>i</b>         n the target string, so <b>return</b> the index         cmp w2, #0           // Check if the end of the target string has been         reached         b.eq strerror       // If so, the string to search was not found <b>in</b> t         he target string, so <b>return</b> -1         cmp w2, w4          // Compare the current character of the target st         ring with the current character of the string to search         b.eq sloop          // If they match, continue searching <b>for</b> the rest         of the string to search </pre>		

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<pre>         ldp x0, x1, [sp], #16 // If they don't match, pop the saved target stri         ng and string to search pointers off the stack         b loop              // and continue searching <b>for</b> the character to se         arch <b>in</b> the target string      strfound:         // Pop the stack frame to restore the saved registers         ldp x0, x1, [sp], #16         // Calculate the index of the found string <b>in</b> the target string         ldr x1, [sp], #16         sub x0, x0, x1         sub x0, x0, #1         // Return the index         ret      cherror:         // No string match found, so pop the stack frame to restore the saved re         gisters         add sp, sp, #16         // Return -1         mov x0, #-1         ret      strerror:         // No string match found, so pop the stack frame to restore the saved re         gisters         add sp, sp, #16         // Return -1         mov x0, #-1         ret </pre>		