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<pre> /**  * replace - Replaces all occurrences of character 'old' in the given string with  * character 'new'.  *  * This function creates a new string in memory, with all occurrences of the character  * 'old' in the input  * string replaced with the character 'new'. The input string remains unchanged.  * The new string is created  * dynamically in memory using the malloc() function. The function returns a pointer  * to the new string.  *  * @param x0: Address of the input string to be modified.  * @param x1: Character to be replaced.  * @param x2: Character to replace 'old' with.  * @return x0: Pointer to the newly created string.  *  * Registers used: x0, x1, x2, x3, w4  * Registers saved: lr  */  .global replace replace:     // Save the link register and the input string pointer on the stack     stp lr, x0, [sp, #-16]!      // Save the 'old' and 'new' characters on the stack     stp x1, x2, [sp, #-16]!      // Get the length of the input string     bl length      // Increment the length by 1 to make space for the null terminator     add x0, x0, #1      // Allocate memory for the new string using malloc     bl malloc      // Restore the 'old' and 'new' characters from the stack     ldp x2, x3, [sp], #16     ldp lr, x1, [sp], #16     stp lr, x0, [sp, #-16]!  loop:     // Load the next character from the input string     ldrb w4, [x1], #1      // If the character is null, we have reached the end of the string     cmp w4, #0     b.eq end      // If the character is the 'old' character, replace it with the 'new' character     cmp w4, w2     b.eq swap      // Otherwise, copy the character to the new string     strb w4, [x0], #1     b loop  swap:     // Copy the 'new' character to the new string     strb w3, [x0], #1 </pre>		

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<pre>     b loop  end:     // Restore the input string pointer and the link register from the stack     ldp lr, x0, [sp], #16     ret </pre>		