In Class Assignment

4/4

Implement a set of functions that perform various operations on strings using dynamic memory allocation.

1. String copy function: Write a function "char* dyn_strcpy(char* destination, const char* source)" that copies the "source" string into "destination". Allocate memory dynamically for "destination" based on the length of "source" return the pointer to "destination"
   a. Hint use strcpy
2. String concatenation function: Write a function "char* dyn_strcat(char* destination, const char* source)" that appends the "source" string to the "destination" string. You need to reallocate memory for "destination" to fit both strings and the null terminator. Return the updated "destination" pointer.
   a. Hint: Use strcat
3. String comparison function: Create a function "int dyn_strcmp(const char* str1, const char* str2)" that compares two strings and returns 0 if they are equal, a negative value if str1 comes before str2 in lexicographical order and a positive value otherwise.

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Concatenated string: Hello, world!
Comparing 'Hello' and 'World': -15
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A skeleton code is provided for you on Blackboard under "Assignments"

Please submit one .c file along with a makefile to the Unix server under the folder you created for the first class assignment named "ClassAssignment4-2"

Please submit one makefile with both programs included