Assignment-6

1. Write a C program which will accept two strings and check whether all characters from the first string are present
   in the second string. Order in which the characters are present is not important. Example run:
   if String-1 is "abcd" and String-2 is "bcxyzad", the program outputs "Yes", whereas if String-1 is "abcdr",
   the program outputs "No". Assume each string can have maximum 10 characters.
       Input: the two strings from the user
       Output: "Yes" or "No"   [2]

2. Write a C program to find the average of "n" integers entered by user.
   To perform this task, allocate memory dynamically, and do not use
   any statically declared large array.
       Input: value of "n", and the "n" integers
       Output: The average of the "n" integers entered   [2]

3. Write a C Program with a function "void remove_non_characters (char *str)"
   to remove all characters in a string except alphabetical characters. For example,
   if the input string is "p2'r"o@gram84iZ./", the output string would be "programiZ". Note that the function
   "remove_non_characters()" should modify the original string.   [2]

4. Write a C Program to sort five words in "Lexicographical Order" (i.e., dictionary order). Use any sorting
   algorithm of your choice. You should collect the words from the user in a loop, and store it in
   an array of strings, with each row containing exactly one string. You are not allowed to allocate
   any extra memory than required; thus, for each row of the array, you must perform dynamic memory allocation.
   Do not forget to free all dynamically allocated memory after the program finishes. The sorting should
   modify the original array of strings.
       Input: five words from the user
       Output: the sorted array contents, printed in order   [4]