ASSIGNMENT 1 – STRING OPERATIONS

IMPLEMENT THE FOLLOWING IN A SINGLE C FILE.

1. Write a function that receives a pointer to a character array and reads input from the user and stores it into the array the pointer points to. The function must return the length of the input read from the user.  
     
   int read(char \*);
2. Write a function that receives a pointer to a character array and returns the length of the array the pointer points to.  
     
   int len(char \*);
3. Write a function that receives two pointers to two character arrays. The function must then copy the contents of array the first pointer points to into the array the second pointer points to.   
     
   void copy(char \*, char\*);
4. Write a function that receives a pointer to a character array and reverses the contents of the array the pointer points to.  
     
   void reverse(char \*);
5. Write a function that receives a pointer to a character array and outputs the contents of the array the pointer points to.   
     
   void print(char \*);
6. Write a function that receives two pointers to two character arrays. The function must then copy the contents of array the second pointer points to at the end of the array the first pointer points to.   
     
   void concat(char \*, char\*);
7. Write a function that receives a pointer to a character array. The function must then remove all vowels from the contents of array the pointer points to. If a vowel is deleted, no blank space must be left. The content to the right must be shifted to left to fill the blank.  
     
   void strip\_vowel(char \*);
8. Write a function that receives a pointer to a character array. The function must then remove all consonants from the contents of array the pointer points to. If a consonant is deleted, no blank space must be left. The content to the right must be shifted to left to fill the blank.  
     
   void strip\_consonants(char \*);
9. Write a main() function that declares two character arrays. Invoke the following function in the sequence specified:
   1. Use read() function to read contents into first array
   2. Use print() function to print the contents of first array
   3. Use copy() function to read contents of first array into second array
   4. Use strip\_vowel() function to remove vowels from the first array
   5. Use reverse() function to reverse the contents of first array
   6. Use strip\_consonants() function to remove vowels from the second array
   7. Use concat() function to concatenate the contents of second array at the end of first array
   8. Use print() function to print the contents of first array
   9. Use len() function to print the length of the first array