String Problems

1. If the string s = "Hello Mom!", write a short sequence to print this string in reverse order.

2. Suppose that two strings are defined using the string class as follows:
   ```
   string str1 = "Hello Mom! I like Jello.";
   string str2 = "Dogs don't care much for Jello";
   ```
   A) Write a short sequence to concatenate the two strings and print the length of the resulting string.
   B) Write a loop that searches through the concatenated string and counts the number of spaces. Print this number to the console.

3. Given the following string: "I like green jello on St. Patrick's Day." Write a short sequence to print the words of this sentence in a column like this:
   I
   like
   jello
   ...

4. Given the sentence "Yes! I like bananas". Use the string functions to insert the word "don't" into this sentence so that it reads "Yes! I don't like bananas".

5. Show what each of the following sequences using string operations prints. In each case, the sequence is preceded by the following declarations:
   ```
   int n = 0;
   string s1 = "Mississippi";
   string s2 = "abcfed";
   string s3 = "Geronimo";
   ```
   A) Console.WriteLine(s1[7]);
   B) n = s1.Compare(s2);
      Console.WriteLine(n);
   C) s1 = s1.ToUpper();
      Console.WriteLine(s1+s2);
   D) if(s1.Compare(s2) == -1)
      Console.WriteLine(s3);
      else
      Console.WriteLine(s1);
   E) s1 = s2 + s3;
      Console.WriteLine(s1);
   F) s1 = s3.Substring(4, 4) + s2;
   G) n = s1.Length;
      Console.WriteLine(n);
   H) s2= s1.Replace("is","si");
   ```