

String related problems

(Total 15 questions)

SL	Problem statement	Difficulty levels						
1.	<p>Write a program in C to find the length of a string without using any library function.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; padding: 5px;">Sample Input</th><th style="text-align: center; padding: 5px;">Sample Output</th></tr> </thead> <tbody> <tr> <td style="padding: 5px;">“My name is andy”</td><td style="padding: 5px; text-align: center;">15</td></tr> <tr> <td style="padding: 5px;">“Abc 123 7&**&”</td><td style="padding: 5px; text-align: center;">13</td></tr> </tbody> </table>	Sample Input	Sample Output	“My name is andy”	15	“Abc 123 7&**&”	13	*
Sample Input	Sample Output							
“My name is andy”	15							
“Abc 123 7&**&”	13							
2.	<p>Write a program in C to concatenate two strings without using any library function.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; padding: 5px;">Sample Input</th><th style="text-align: center; padding: 5px;">Sample Output</th></tr> </thead> <tbody> <tr> <td style="padding: 5px;">“My name ” “is andy”</td><td style="padding: 5px; text-align: center;">“My name is andy”</td></tr> <tr> <td style="padding: 5px;">“123abc” “*A*B”</td><td style="padding: 5px; text-align: center;">“123abc*A*B”</td></tr> </tbody> </table>	Sample Input	Sample Output	“My name ” “is andy”	“My name is andy”	“123abc” “*A*B”	“123abc*A*B”	*
Sample Input	Sample Output							
“My name ” “is andy”	“My name is andy”							
“123abc” “*A*B”	“123abc*A*B”							
3.	<p>Write a program in C to count how many vowels are there in a string.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; padding: 5px;">Sample Input</th><th style="text-align: center; padding: 5px;">Sample Output</th></tr> </thead> <tbody> <tr> <td style="padding: 5px;">“My name is andy”</td><td style="padding: 5px; text-align: center;">4</td></tr> <tr> <td style="padding: 5px;">“Are you READY yet?”</td><td style="padding: 5px; text-align: center;">7</td></tr> </tbody> </table>	Sample Input	Sample Output	“My name is andy”	4	“Are you READY yet?”	7	*
Sample Input	Sample Output							
“My name is andy”	4							
“Are you READY yet?”	7							
4.	<p>Write a program in C to count the number of words in a string.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; padding: 5px;">Sample Input</th><th style="text-align: center; padding: 5px;">Sample Output</th></tr> </thead> <tbody> <tr> <td style="padding: 5px;">“My name is andy”</td><td style="padding: 5px; text-align: center;">4</td></tr> <tr> <td style="padding: 5px;">“Abc 123 7&**&”</td><td style="padding: 5px; text-align: center;">3</td></tr> </tbody> </table>	Sample Input	Sample Output	“My name is andy”	4	“Abc 123 7&**&”	3	*
Sample Input	Sample Output							
“My name is andy”	4							
“Abc 123 7&**&”	3							
5.	<p>Write a program in C to find the reverse of a string.</p>	**						

	<table border="1"> <thead> <tr> <th>Sample Input</th><th>Sample Output</th></tr> </thead> <tbody> <tr> <td>“My name is Andy”</td><td>“ydnA si eman yM”</td></tr> <tr> <td>“Abc 123 7&*&”</td><td>“*&*&7 321 cbA”</td></tr> </tbody> </table>	Sample Input	Sample Output	“My name is Andy”	“ydnA si eman yM”	“Abc 123 7&*&”	“*&*&7 321 cbA”	
Sample Input	Sample Output							
“My name is Andy”	“ydnA si eman yM”							
“Abc 123 7&*&”	“*&*&7 321 cbA”							
6.	<p>Write a program in C to convert lowercase string to uppercase.</p> <table border="1"> <thead> <tr> <th>Sample Input</th><th>Sample Output</th></tr> </thead> <tbody> <tr> <td>“My name is andy”</td><td>“MY NAME IS ANDY”</td></tr> <tr> <td>“& I am 20 years old”</td><td>“& I AM 20 YEARS OLD”</td></tr> </tbody> </table>	Sample Input	Sample Output	“My name is andy”	“MY NAME IS ANDY”	“& I am 20 years old”	“& I AM 20 YEARS OLD”	*
Sample Input	Sample Output							
“My name is andy”	“MY NAME IS ANDY”							
“& I am 20 years old”	“& I AM 20 YEARS OLD”							
7.	<p>Write a program in C to toggle the case of each character in a string.</p> <table border="1"> <thead> <tr> <th>Sample Input</th><th>Sample Output</th></tr> </thead> <tbody> <tr> <td>“My name is Andy”</td><td>“mY NAME IS aNDY”</td></tr> <tr> <td>“& I am 20 Years old”</td><td>“& i AM 20 yEARS OLD”</td></tr> </tbody> </table>	Sample Input	Sample Output	“My name is Andy”	“mY NAME IS aNDY”	“& I am 20 Years old”	“& i AM 20 yEARS OLD”	*
Sample Input	Sample Output							
“My name is Andy”	“mY NAME IS aNDY”							
“& I am 20 Years old”	“& i AM 20 yEARS OLD”							
8.	<p>Write a program in C to sort a string array in alphabetic order.</p> <table border="1"> <thead> <tr> <th>Sample Input</th><th>Sample Output</th></tr> </thead> <tbody> <tr> <td>“My name is Andy”</td><td>“ AMadeimnnssyy”</td></tr> <tr> <td>“Abc 123 7&*&”</td><td>“ &&**1237Abc”</td></tr> </tbody> </table>	Sample Input	Sample Output	“My name is Andy”	“ AMadeimnnssyy”	“Abc 123 7&*&”	“ &&**1237Abc”	**
Sample Input	Sample Output							
“My name is Andy”	“ AMadeimnnssyy”							
“Abc 123 7&*&”	“ &&**1237Abc”							
9.	<p>Write a program in C to count the occurrences of a character in a string regardless of its case.</p> <table border="1"> <thead> <tr> <th>Sample Input</th><th>Sample Output</th></tr> </thead> <tbody> <tr> <td>“My name is Andy” ‘a’</td><td>2</td></tr> <tr> <td>“WELCOME to CSE, everyone” ‘E’</td><td>6</td></tr> </tbody> </table>	Sample Input	Sample Output	“My name is Andy” ‘a’	2	“WELCOME to CSE, everyone” ‘E’	6	*
Sample Input	Sample Output							
“My name is Andy” ‘a’	2							
“WELCOME to CSE, everyone” ‘E’	6							
10.	<p>Write a program in C to check whether a string is a palindrome or not.</p>	**						

	<table border="1"> <thead> <tr> <th>Sample Input</th><th>Sample Output</th></tr> </thead> <tbody> <tr> <td>“My name is andy”</td><td>no</td></tr> <tr> <td>“madam”</td><td>yes</td></tr> </tbody> </table>	Sample Input	Sample Output	“My name is andy”	no	“madam”	yes			
Sample Input	Sample Output									
“My name is andy”	no									
“madam”	yes									
11.	<p>Write a program in C to add the digits in a string.</p> <table border="1"> <thead> <tr> <th>Sample Input</th><th>Sample Output</th></tr> </thead> <tbody> <tr> <td>“I am 20 years old”</td><td>2</td></tr> <tr> <td>“Abc 123 7&*&*”</td><td>13</td></tr> </tbody> </table>	Sample Input	Sample Output	“I am 20 years old”	2	“Abc 123 7&*&*”	13	**		
Sample Input	Sample Output									
“I am 20 years old”	2									
“Abc 123 7&*&*”	13									
12.	<p>Write a program in C to count occurrences of a word in a string.</p> <table border="1"> <thead> <tr> <th>Sample Input</th><th>Sample Output</th></tr> </thead> <tbody> <tr> <td>“I liked the story about the sad giant” “the”</td><td>2</td></tr> <tr> <td>“It is what it is” “it”</td><td>1</td></tr> </tbody> </table>	Sample Input	Sample Output	“I liked the story about the sad giant” “the”	2	“It is what it is” “it”	1	***		
Sample Input	Sample Output									
“I liked the story about the sad giant” “the”	2									
“It is what it is” “it”	1									
13.	<p>Write a program in C to remove all repeated characters in a string.</p> <table border="1"> <thead> <tr> <th>Sample Input</th><th>Sample Output</th></tr> </thead> <tbody> <tr> <td>“i like programming in C”</td><td>“i lkeprogamnC”</td></tr> <tr> <td>“My name is Andy”</td><td>“My nameisAd”</td></tr> </tbody> </table>	Sample Input	Sample Output	“i like programming in C”	“i lkeprogamnC”	“My name is Andy”	“My nameisAd”	***		
Sample Input	Sample Output									
“i like programming in C”	“i lkeprogamnC”									
“My name is Andy”	“My nameisAd”									
14.	<p>Write a program in C to find the maximum occurring character in a string.</p> <table border="1"> <thead> <tr> <th>Sample Input</th><th>Sample Output</th></tr> </thead> <tbody> <tr> <td>“Welcome to CSE”</td><td>E (or e)</td></tr> <tr> <td>“mmmttssarrddd”</td><td>D (or d)</td></tr> <tr> <td>“mmmttssarrrDDd”</td><td>D (or d)</td></tr> </tbody> </table>	Sample Input	Sample Output	“Welcome to CSE”	E (or e)	“mmmttssarrddd”	D (or d)	“mmmttssarrrDDd”	D (or d)	***
Sample Input	Sample Output									
“Welcome to CSE”	E (or e)									
“mmmttssarrddd”	D (or d)									
“mmmttssarrrDDd”	D (or d)									
15.	<p>Write a program in C to reverse the words in a string.</p>	***								

Sample Input	Sample Output
“My name is Andy”	“Andy is name My”
“Abc 123 7&*&”	“7&*& 123 Abc”