

Practice Set: String (12 problems) – v202

SL	Problem statement	Difficulty levels										
1.	Program that will take as input a string, and find out its length.	*										
	<table><tr><th>Sample input</th><th>Sample output</th></tr><tr><td>SPL Laboratory</td><td>14</td></tr><tr><td>United International University</td><td>31</td></tr></table>		Sample input	Sample output	SPL Laboratory	14	United International University	31				
	Sample input		Sample output									
	SPL Laboratory		14									
	United International University		31									
2.	Program that will take as input a string, and convert all the uppercase letters in it to lowercase.	*										
	<table><tr><th>Sample input</th><th>Sample output</th></tr><tr><td>CSI 122</td><td>csi 122</td></tr><tr><td>United International University</td><td>united international university</td></tr></table>		Sample input	Sample output	CSI 122	csi 122	United International University	united international university				
	Sample input		Sample output									
	CSI 122		csi 122									
	United International University		united international university									
3.	Program that will take as input a string, and toggle cases of all the letters.	*										
	<table><tr><th>Sample input</th><th>Sample output</th></tr><tr><td>SPL Laboratory</td><td>spl LABORATORY</td></tr><tr><td>United International University</td><td>uNITED iNTERNATIONAL uNIVERSITY</td></tr></table>		Sample input	Sample output	SPL Laboratory	spl LABORATORY	United International University	uNITED iNTERNATIONAL uNIVERSITY				
	Sample input		Sample output									
	SPL Laboratory		spl LABORATORY									
	United International University		uNITED iNTERNATIONAL uNIVERSITY									
4.	Program that will find out if a given string is a palindrome or not.	**										
	<table><tr><th>Sample input</th><th>Sample output</th></tr><tr><td>civic</td><td>Palindrome</td></tr><tr><td>economic</td><td>Not palindrome</td></tr></table>		Sample input	Sample output	civic	Palindrome	economic	Not palindrome				
	Sample input		Sample output									
	civic		Palindrome									
	economic		Not palindrome									
5.	Program that will take as input two strings, and find out the one that is lexicographically smaller than the other. <i>A lexicographically smaller string appears earlier in a dictionary.</i>	**										
	<table><tr><th>Sample input</th><th>Sample output</th></tr><tr><td>SPL Lab SPL Lad</td><td>SPL Lab</td></tr><tr><td>SPL Lab SPL Bad</td><td>SPL Bad</td></tr><tr><td>SPL Lab SPL Lab</td><td>Both equal</td></tr><tr><td>SPL Lab SPL Laboratory</td><td>SPL Lab</td></tr></table>		Sample input	Sample output	SPL Lab SPL Lad	SPL Lab	SPL Lab SPL Bad	SPL Bad	SPL Lab SPL Lab	Both equal	SPL Lab SPL Laboratory	SPL Lab
	Sample input		Sample output									
	SPL Lab SPL Lad		SPL Lab									
	SPL Lab SPL Bad		SPL Bad									
	SPL Lab SPL Lab		Both equal									
	SPL Lab SPL Laboratory		SPL Lab									

6.	Program that will copy the contents of a string to another.	*						
<table><tr><td>Sample input</td><td>Sample output</td></tr><tr><td>SPL Lab</td><td>SPL Lab</td></tr><tr><td>United International University</td><td>United International University</td></tr></table>		Sample input	Sample output	SPL Lab	SPL Lab	United International University	United International University	
Sample input	Sample output							
SPL Lab	SPL Lab							
United International University	United International University							
7.	Program that will take as input two strings str1 and str2, and concatenates the contents of str2 to the end of str1.	**						
<table><tr><td>Sample input</td><td>Sample output</td></tr><tr><td>SPL Laboratory Discrete Math</td><td>SPL LaboratoryDiscrete Math</td></tr></table>		Sample input	Sample output	SPL Laboratory Discrete Math	SPL LaboratoryDiscrete Math			
Sample input	Sample output							
SPL Laboratory Discrete Math	SPL LaboratoryDiscrete Math							
8.	Program that will take as input two strings str1 and str2, and find out if str2 is a substring of str1.	***						
<table><tr><td>Sample input</td><td>Sample output</td></tr><tr><td>SPL Laboratory Lab</td><td>Substring</td></tr><tr><td>SPL Laboratory APL</td><td>Not substring</td></tr></table>		Sample input	Sample output	SPL Laboratory Lab	Substring	SPL Laboratory APL	Not substring	
Sample input	Sample output							
SPL Laboratory Lab	Substring							
SPL Laboratory APL	Not substring							
9.	Program that will take as input a string (containing letters and spaces only), and print the words contained in the string in separate lines.	***						
<table><tr><td>Sample input</td><td>Sample output</td></tr><tr><td>SPL Laboratory</td><td>SPL Laboratory</td></tr><tr><td>United International University</td><td>United International University</td></tr></table>		Sample input	Sample output	SPL Laboratory	SPL Laboratory	United International University	United International University	
Sample input	Sample output							
SPL Laboratory	SPL Laboratory							
United International University	United International University							

10.	<p>Program that will change a password. The actual password and the input password will be taken input. If they match, the system will print “Login successful.” Otherwise it will print “Login failed.”</p> <table><tr><th>Sample input</th><th>Sample output</th></tr><tr><td>abc123 abcdef</td><td>Login failed</td></tr><tr><td>A1b2c3 A1b2c3</td><td>Login successful</td></tr></table>	Sample input	Sample output	abc123 abcdef	Login failed	A1b2c3 A1b2c3	Login successful	**		
Sample input	Sample output									
abc123 abcdef	Login failed									
A1b2c3 A1b2c3	Login successful									
11.	<p>Program to find if two strings are the same ignoring case.</p> <table><tr><th>Sample input</th><th>Sample output</th></tr><tr><td>spl sql</td><td>No</td></tr><tr><td>John@bscse.uiu.ac.bd john@bscse.uiu.ac.bd</td><td>Yes</td></tr></table>	Sample input	Sample output	spl sql	No	John@bscse.uiu.ac.bd john@bscse.uiu.ac.bd	Yes	**		
Sample input	Sample output									
spl sql	No									
John@bscse.uiu.ac.bd john@bscse.uiu.ac.bd	Yes									
12.	<p>Program to find if two words are anagrams. [Two strings are anagrams if they have the same number of occurrences of each letter used in the strings]</p> <table><tr><th>Sample input</th><th>Sample output</th></tr><tr><td>LISTEN SILENT</td><td>Yes</td></tr><tr><td>GREASE AGREES</td><td>Yes</td></tr><tr><td>MATCH CATCH</td><td>No</td></tr></table>	Sample input	Sample output	LISTEN SILENT	Yes	GREASE AGREES	Yes	MATCH CATCH	No	***
Sample input	Sample output									
LISTEN SILENT	Yes									
GREASE AGREES	Yes									
MATCH CATCH	No									