**COMSATS** **University Islamabad, Lahore Campus**

**Department of Computer Science**



**Quiz 3 – Semester Spring 2021**

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| Course Title: | Programming Fundamentals | | | | Course Code: | | CSC103 | Credit Hours: | 4(3,1) |
| Course Instructor/s: | Tahir Muhammad | | | | Programme Name: | | BSE/BCS | | |
| Semester: | 1st | Batch: | Sp21 | Session: | C | | Time | 60 Minutes | |
| Student’s Name: | **Muhammad Talha Shafiq choudhary** | | | | Reg. No. | Sp21-BSE-008 | | | |
| **Important Instructions / Guidelines:**   * Answer all questions. * Do not give multiple answers for a question. * Cutting and overwriting is not allowed. * Submit your exam through MS Forms. | | | | | | | | | |

**Question 1:** Write a program in C language that takes up to 100 characters from user in an array. After receiving input from user pass that array to a function “checkmyString(char arr[])”. This function will match and remove all special characters from the given string, it will also print the total number of special characters removed, the updated string and total number of characters of the original string. **[CLO3, PLO3, C1] 10 Marks**

**Solution:**

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| **#include<stdio.h>**  **#include<string.h>**  **void checkmyString(char arr[]);**  **int main()**  **{**  **char arr[100];**  **printf("Enter a string: ");**  **fgets(arr,sizeof arr,stdin);**  **checkmyString(arr);**  **return 0;**  **}**  **void checkmyString(char arr[])**  **{**  **int i,j,size;**  **size = strlen(arr);**  **for(i = 0; arr[i] != '\0'; ++i)**  **{**  **while (!( (arr[i] >= 'a' && arr[i] <= 'z') || (arr[i] >= 'A' && arr[i] <= 'Z') || arr[i] == '\0') )**  **{**  **for(j = i; arr[j] != '\0'; ++j){**  **arr[j] = arr[j+1];**  **}**  **arr[j] = '\0';**  **}**  **}**  **printf("\nResultant String is : ");**  **puts(arr);**  **int newString;**  **newString = strlen(arr);**  **printf("\nThe number of special characters removed are = %d",(size - newString));**  **printf("\nThe size of the new string is %d",newString);**  **}** |