



**Green University of Bangladesh**  
**Department of Computer Science and Engineering(CSE)**  
**Faculty of Sciences and Engineering**  
**Semester: (Summer, Year:2022), B.Sc. in CSE (Day)**

**LAB REPORT NO :08**

**Course Title: Structured Programming Lab**

**Course Code: CSE 104**

**Section: DE**

**Student Details**

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**Submission Date : 14-Sep-22**  
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<b><u>Lab Report Status</u></b>	
<b>Marks: .....</b>	<b>Signature:.....</b>
<b>Comments:.....</b>	<b>Date:.....</b>

**Problem 01: Write a program in C to find the length of a string without using library function**

**Code:**

```
1  #include<stdio.h>
2  #include<string.h>
3  int main()
4  {
5      char str[100];
6      int i,count=0;
7      printf("Enter a string:");
8      scanf("%s",str);
9      for(i=0;str[i]!='\0';i++)
10     {
11         count++;
12     }
13     printf("Length :%d",count);
14
15     return 0;
16 }
17
```

**Output:**

```
Enter a string:Israil
Length :6
Process returned 0 (0x0)   execution time : 2.784 s
Press any key to continue.
```

**Problem 02: Write a program in C to count total number of alphabets, digits and special characters in a string.**

**Code:**

```
1  #include<stdio.h>
2  #include<string.h>
3  int main()
4  {
5      char str[100];
6      int i, count=0;
7      printf("Enter a string:");
8      gets(str);
9      for(i=0; str[i]!='\0'; i++)
10     {
11         if(str[i]!=' ')
12         {
13             count++;
14         }
15     }
16     printf("Length :%d", count);
17
18     return 0;
19 }
20
```

**Output:**

```
Enter a string:I am a GUBian
Length :10
Process returned 0 (0x0)   execution time : 7.869 s
Press any key to continue.
```

**Problem 03: Write a program in C to extract a substring from a given string.**

**Code:**

```
1  #include<stdio.h>
2  #include<string.h>
3  int main()
4  {
5      char str[100];
6      char sstr[100];
7      int l,po,c=0;
8      printf("Enter a string:");
9      fgets(str,sizeof str,stdin);
10     printf("Enter the position to get substring:");
11     scanf("%d",&po);
12     l=strlen(str);
13     while(c<l)
14     {
15         sstr[c]=str[po+c-1];
16         c++;
17     }
18     sstr[c]='\0';
19     printf("The substring: %s",sstr);
20     return 0;
21 }
22
```

**Output:**

```
Enter a string:Facebook Youtube
Enter the position to get substring:9
The substring: Youtube

Process returned 0 (0x0)   execution time : 70.633 s
Press any key to continue.
```

**Problem 04: Write a program in C to replace the spaces of a string with a specific character.**

**Code:**

```
1  include<stdio.h>
2  include<ctype.h>
3  int main()
4
5      int newc;
6      char c;
7      int ctr=0;
8      char str[100];
9      printf("Enter a string : ");
10     fgets(str, sizeof str, stdin);
11     printf("Enter a character to replace : ");
12     scanf("%c",&c);
13     printf("After replacing :\n",c);
14     while (str[ctr])
15     {
16         newc=str[ctr];
17         if (isspace(newc))
18             newc=c;
19         putchar (newc);
20         ctr++;
21     }
22     printf("\n\n");
23     return 0;
24
25
```

**Output:**

```
Enter a string : hello hi good
Enter a character to replace : #
After replacing :
hello#hi#good#

Process returned 0 (0x0)   execution time : 17.962 s
Press any key to continue.
```