



Green University of Bangladesh
Department of Computer Science and Engineering(CSE)

Faculty of Sciences and Engineering
Semester: (Fall, Year:2022), B.Sc. in CSE (Day)

CLP NO 4

Course Title: Structure programming Lab
Course Code: CSE 104 Section:DB

Lab Experiment Name: _ _ _ _ _

Student Details

Name		ID
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Lab Date : _ _ _ _ **8-1-22** _ _ _ _ _

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Submission Date : _ _ _ _ **8-1-22** _ _ _ _ _

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Course Teacher's Name : **_Sultanul Islam ovi_** _ _ _ _ _

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[For Teachers use only: Don't Write Anything inside this box]

Lab Report Status

Marks:

Comments:.....

Signature:.....

Date:.....

Tasks

Answer to the problem no:2: Write a program in C to implement the library functions.

[15 Marks]

a. strcat operation

b. strlen operation

c. strrev operation

d. strlwr operation

e.strupr operatio

Problem Analysis:

Solution Design:

Code:

```
#include<stdio.h>

void concat(char[], char[]);
int sLength(char[]);
void strReverse(char s[]);
void strLowerUpper(char ch);
int main() {
    char s1[50], s2[30];
    char ch;
    printf("\nEnter String 1 :");
    gets(s1);
    printf("\nEnter String 2 :");
    gets(s2);
    printf("\nEnter an Alphabet :");
    scanf("%c",&ch);
    concat(s1, s2);
    strReverse(s2);
    strLowerUpper(ch);
    printf("\nConcatated string is :%s\n ", s1);
    printf("The length is:%d\n",sLength(s1));
    return (0);
}
```

```

void concat(char s1[], char s2[]) {
    int i, j;
    i = sLength(s1);
    for (j = 0; s2[j] != '\0'; i++, j++) {
        s1[i] = s2[j];
    }
    s1[i] = '\0';
}

int sLength(char s[] ){
    int length = 0;

    while (s[length] != '\0'){
        length++;
    }
    return length;
}

void strReverse(char s[])
{
    int i = 0;
    int j = sLength(s) - 1;

    while (i < j) {
        char temp = s[i];
        s[i] = s[j];
        s[j] = temp;
        i++;
        j--;
    }

    printf("\nReverse string is : %s\n", s);
}

void strLowerUpper(char ch)
{
    if (ch >= 'A' && ch <= 'Z') {
        printf("Character is uppercase Letters\n");
    } else if (ch >= 'a' && ch <= 'z') {
        printf("Character is Lowercase Letters\n");
    } else {
        printf("Non alphabet character\n");
    }
}

```

```
}  
}
```

```

input
wur __attribute__((deprecated));
    |               ^~~~
main.c:13:2: warning: 'gets' is deprecated [-Wdeprecated-declarations]
    13 |     gets(s2);
        |     ^~~~
In file included from main.c:1:
/usr/include/stdio.h:577:14: note: declared here
    577 | extern char *gets (char *__s) __
wur __attribute__((deprecated));
    |               ^~~~
/usr/bin/ld: /tmp/ccpC48d7.o: in function `main':
main.c:(.text+0x34): warning: the `gets' function is dangerous and should not be used.

Enter String 1 :nae

Enter String 2 :em

Enter an Alphabet :abcdef

Reverse string is : me
Character is  Lowercase Letters

Concatenated string is :naeem
The length is:5

...Program finished with exit code 0
Press ENTER to exit console.

```

Output:

Answer to the problem no: 2

Problem Analysis:

Solution Design:

Code:

Output:

(screenshot of the terminal)

Answer to the problem no: 3

Problem Analysis:

Solution Design:

Code:

Output:

(screenshot of the terminal)