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)

Assignment 03
Course Title: Structured Programming
Course Code: CSE 103   Section: DE

Student Details

Name	ID
Md. Israil Fakir	221902125

Submission Date   : 11-Sep-22
Course Teacher's Name   : Mahbubur Rahaman

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Problem 01: Access each character of a string and print separately.

Code:

```c
1    #include<stdio.h>
2    #include<string.h>
3    int main()
4    {
5        char str[500];
6        int l=0;
7        printf("Enter a string: ");
8        scanf("%s",str);
9        l=strlen(str);
10       for(int i=0;i<l;i++)
11       {
12           printf("%c ",str[i]);
13       }
14
15       return 0;
16   }
17
```

Output:

```
Enter a string: Israil
I s r a i l
Process returned 0 (0x0)    execution time : 8.198 s
Press any key to continue.
```

Problem 02: Compare two strings (same or not).

Code:

```c
1    #include<stdio.h>
2    #include<string.h>
3    int main()
4    {
5        char s1[500];
6        char s2[500];
7        int j;
8        printf("Enter 1st string :");
9        scanf("%s",s1);
10       printf("Enter 2nd string :");
11       scanf("%s",s2);
12       j=strcmp(s1,s2);
13       if(j==0)
14       {
15           printf("Same");
16       }
17       else
18       {
19           printf("Not same");
20       }
21       return 0;
22   }
23
```

Output:

```
Enter 1st string :green
Enter 2nd string :green
Same
Process returned 0 (0x0)    execution time : 37.486 s
Press any key to continue.
```

```
Enter 1st string :Dhaka
Enter 2nd string :Bangladesh
Not same
Process returned 0 (0x0)    execution time : 10.861 s
Press any key to continue.
```

Problem 03: Reverse a string

Code:

```c
1    #include<stdio.h>
2    #include<string.h>
3    int main()
4    {
5        char s[500];
6        int re;
7        printf("Enter a string to reverse :");
8        scanf("%s",s);
9        re=strrev(s);
10       printf("Reversed the string : %s",re);
11       return 0;
12   }
13
```

Output:

```
Enter a string to reverse :Dhaka12
Reversed the string : 21akahD
Process returned 0 (0x0)    execution time : 5.958 s
Press any key to continue.
```

Problem 04: Concatenate string without strcat()

Code:

```
1    #include<stdio.h>
2    int main()
3    {
4        char str1[500],str2[500],i,j;
5        printf("Enter 1st string :");
6        scanf("%s",str1);
7        printf("Enter 2nd string :");
8        scanf("%s",str2);
9        for(i=0;str1[i]!=0;++i);
10       for(j=0;str2[j]!=0;++j,++i)
11       {
12           str1[i]=str2[j];
13       }
14       str1[i]='\0';
15       printf("Concatenated 2 string:%s",str1);
16       return 0;
17   }
18
```

Output:

```
Enter 1st string :Hi
Enter 2nd string :Hello
Concatenated 2 string:HiHello
Process returned 0 (0x0)   execution time : 4.833 s
Press any key to continue.
```

Problem 05: Find Out number of total characters in a string.

Code:

```
1    #include<stdio.h>
2    #include<string.h>
3    int main()
4    {
5        char s[500];
6        int i;
7        int totalchar=0;
8        printf("Enter a string to count:");
9        gets(s);
10       for(i=0;s[i]!='\0';i++)
11       {
12           totalchar++;
13       }
14       printf("Entered string value :%d",totalchar);
15       getch(s);
16
17       return 0;
18   }
19
```

Output

```
Enter a string to count:Green
Entered string value :5
Process returned 0 (0x0)   execution time : 8.970 s
Press any key to continue.
:
```

Problem 06: Use the functions strcpy(),strcmp(),stccat(),strncpy()

strcpy()

Code:

```c
#include<stdio.h>
#include<string.h>
int main()
{
    char str1[200];
    char str2[200];
    printf("Enter the 1st string:");
    gets(str1);
    printf("Enter the 2nd string:");
    gets(str2);
    printf("1st string :%s",str1);
    printf("\n2nd string :%s",str2);
    strcpy(str2,str1);
    printf("\nAfter copying string 1st:%s",str2);
    printf("\nAfter copying string 2nd:%s\n",str1);
    return 0;
}
```

Output:

```
Enter the 1st string:green
Enter the 2nd string:bangladesh
1st string :green
2nd string :bangladesh
After copying string 1st:green
After copying string 2nd:green

Process returned 0 (0x0)   execution time : 16.389 s
Press any key to continue.
```

strcmp()

Code:

```
1   #include<stdio.h>
2   #include<string.h>
3   int main()
4   {
5       char str1[50];
6       char str2[50];
7       int com;
8       printf("Enter the 1st string:");
9       gets(str1);
10      printf("Enter the 2nd string:");
11      gets(str2);
12      com=strcmp(str1,str2);
13      if(com==0)
14      {
15          printf("There are equal");
16      }
17      else
18      {
19          printf("There are not equal");
20      }
21      return 0;
22  }
23
```

Output:

```
Enter the 1st string:Israil
Enter the 2nd string:Israil
There are equal
Process returned 0 (0x0)    execution time : 11.162 s
Press any key to continue.
```

stccat()

Code:

```c
#include<stdio.h>
#include<string.h>
int main()
{
    char str1[50];
    char str2[50];
    printf("Enter the 1st string:");
    gets(str1);
    printf("Enter the 2nd string:");
    gets(str2);
    strcat(str1,str2);
    printf("%s",str1);
    return 0;
}
```

Output:

```
Enter the 1st string:gre
Enter the 2nd string:en
green
Process returned 0 (0x0)    execution time : 10.998 s
Press any key to continue.
```