

Institute of technology of Cambodia

Department of Information and communication Engineering



The lesson taking about basic data type and use Boolean, ASCII,
Function string, character.

TP3-Work with String functions

TP: Algorithm and Programming

Lecturer: BOU CHANNA

Student: VEN THON

ID: e20191250

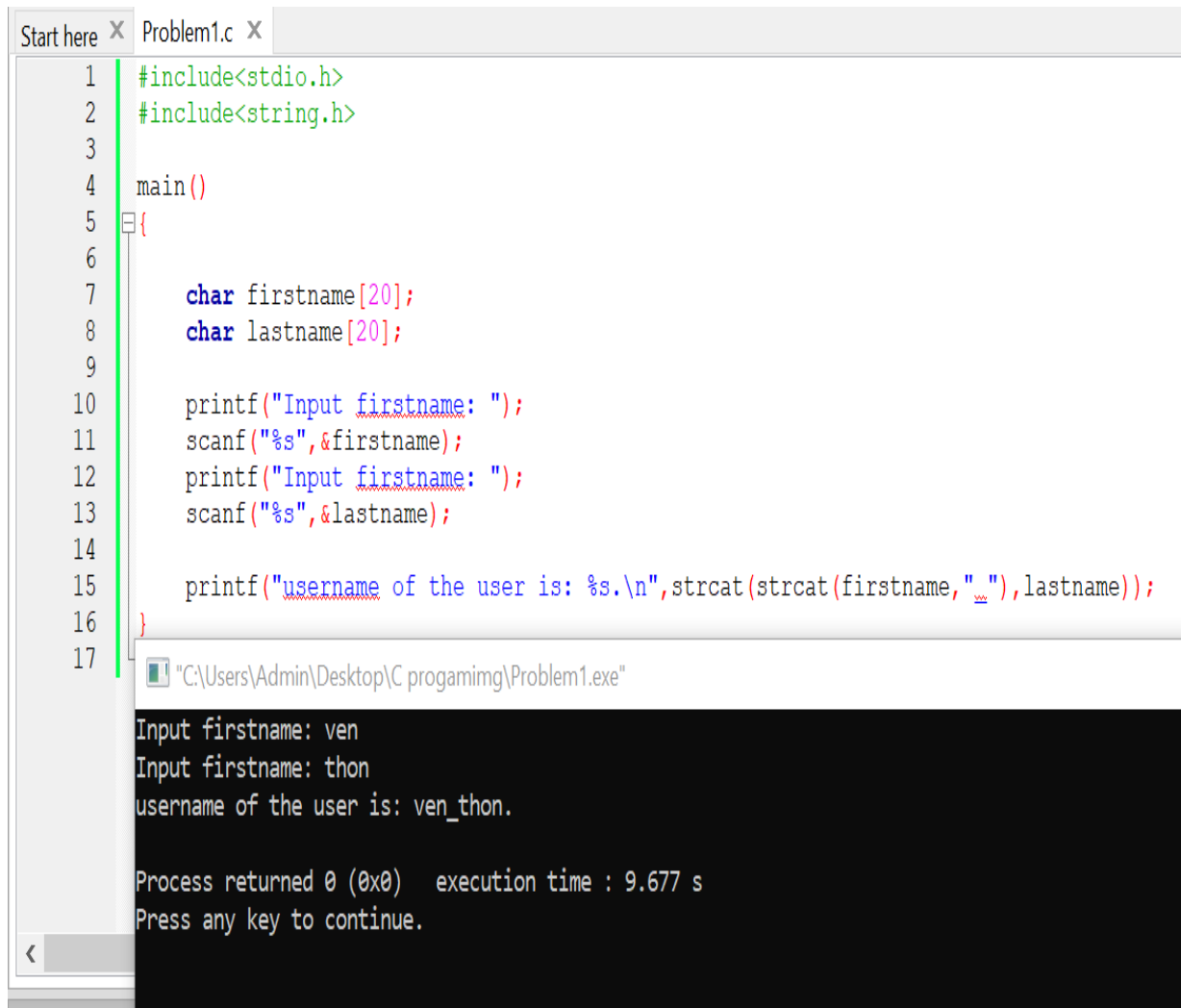
Group: I3-GIC-C

Year: 2021-2022

Table of Contents

Problem1: Write a C program to concatenate a string. The user is required to input his/her first name and last name. the program display username by concatenating the first name and last name together.	3
Problem2: write a c program ask a user for a text. Display the total character of the input string.	4
Problem3: write a c program to get a first name from a user. Find the first letter and last letter of the input first name.	5
Problem4. Write a c program to ask a user to input a piece of text. Convert the text to uppercase. Display on screen both the source input and the converted text.	6
Problem5. Ask a user for a string. Convert it to lowercase.	7

Problem1: Write a C program to concatenate a string. The user is required to input his/her first name and last name. the program display username by concatenating the first name and last name together.



```
Start here x Problem1.c x
1  #include<stdio.h>
2  #include<string.h>
3
4  main()
5  {
6
7      char firstname[20];
8      char lastname[20];
9
10     printf("Input firstname: ");
11     scanf("%s",&firstname);
12     printf("Input lastname: ");
13     scanf("%s",&lastname);
14
15     printf("username of the user is: %s.\n",strcat(strcat(firstname,"_"),lastname));
16 }
17
```

"C:\Users\Admin\Desktop\C progaming\Problem1.exe"

```
Input firstname: ven
Input lastname: thon
username of the user is: ven_thon.

Process returned 0 (0x0)   execution time : 9.677 s
Press any key to continue.
```

Problem2: write a c program ask a user for a text. Display the total character of the input string.

Problem2.c

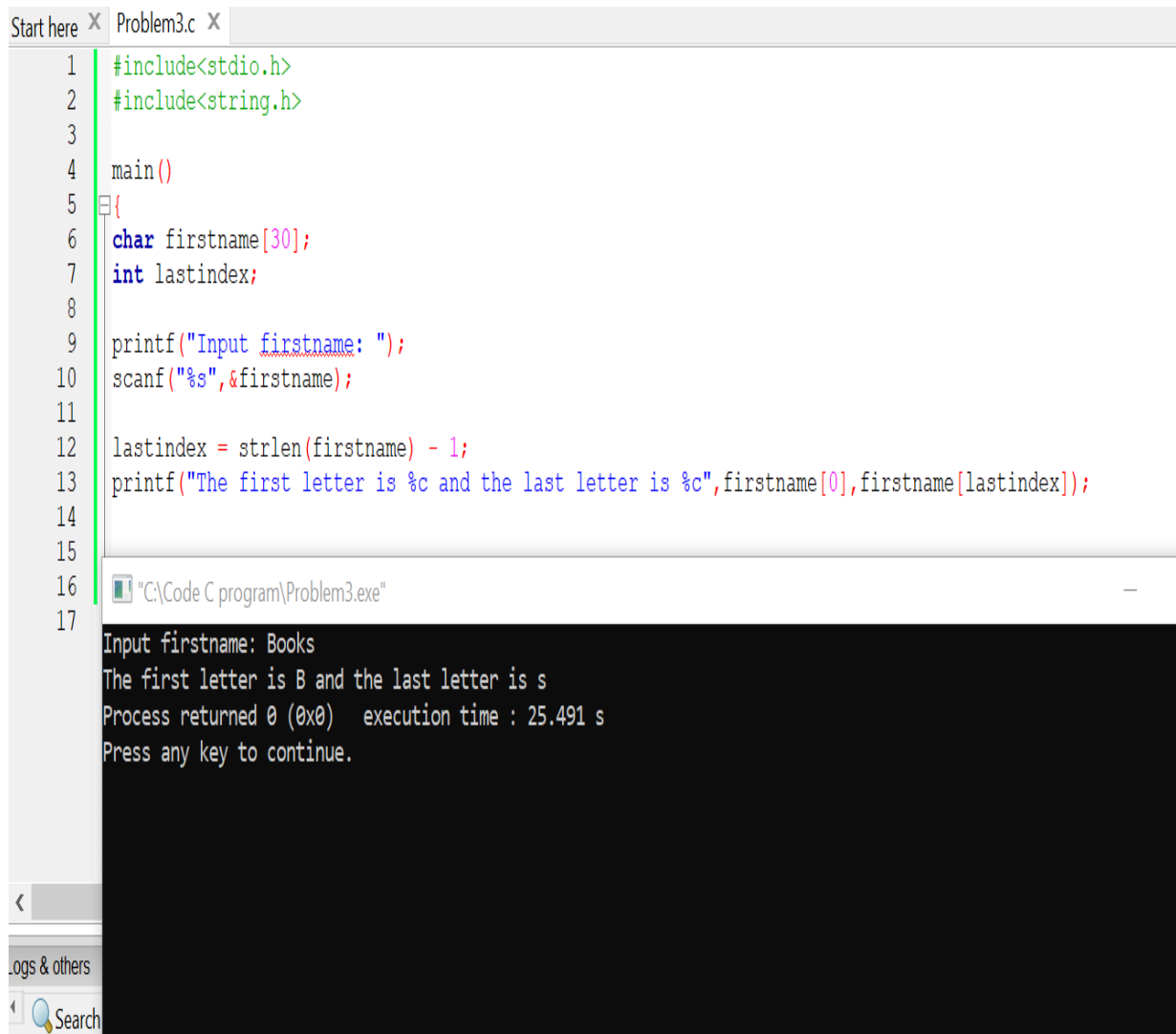
```
1  #include<stdio.h>
2  #include<string.h>
3
4  main()
5  {
6
7      char text[20];
8      int a;
9
10     printf("Input a text: ");
11     scanf("%s",&text);
12
13     a =strlen(text);
14
15     printf("The text \"%s\" has %d characters.\n\n",text,a);
16 }
```

C:\Users\Admin\Desktop\C progaming\Problem2.exe

```
Input a text: Everyone
The text "Everyone" has 8 characters.
```

```
-----
Process exited after 36.95 seconds with return value 39
Press any key to continue . . .
```

Problem3: write a c program to get a first name from a user. Find the first letter and last letter of the input first name.



The image shows a screenshot of a C program being written and executed. The code is in a file named 'Problem3.c' and is as follows:

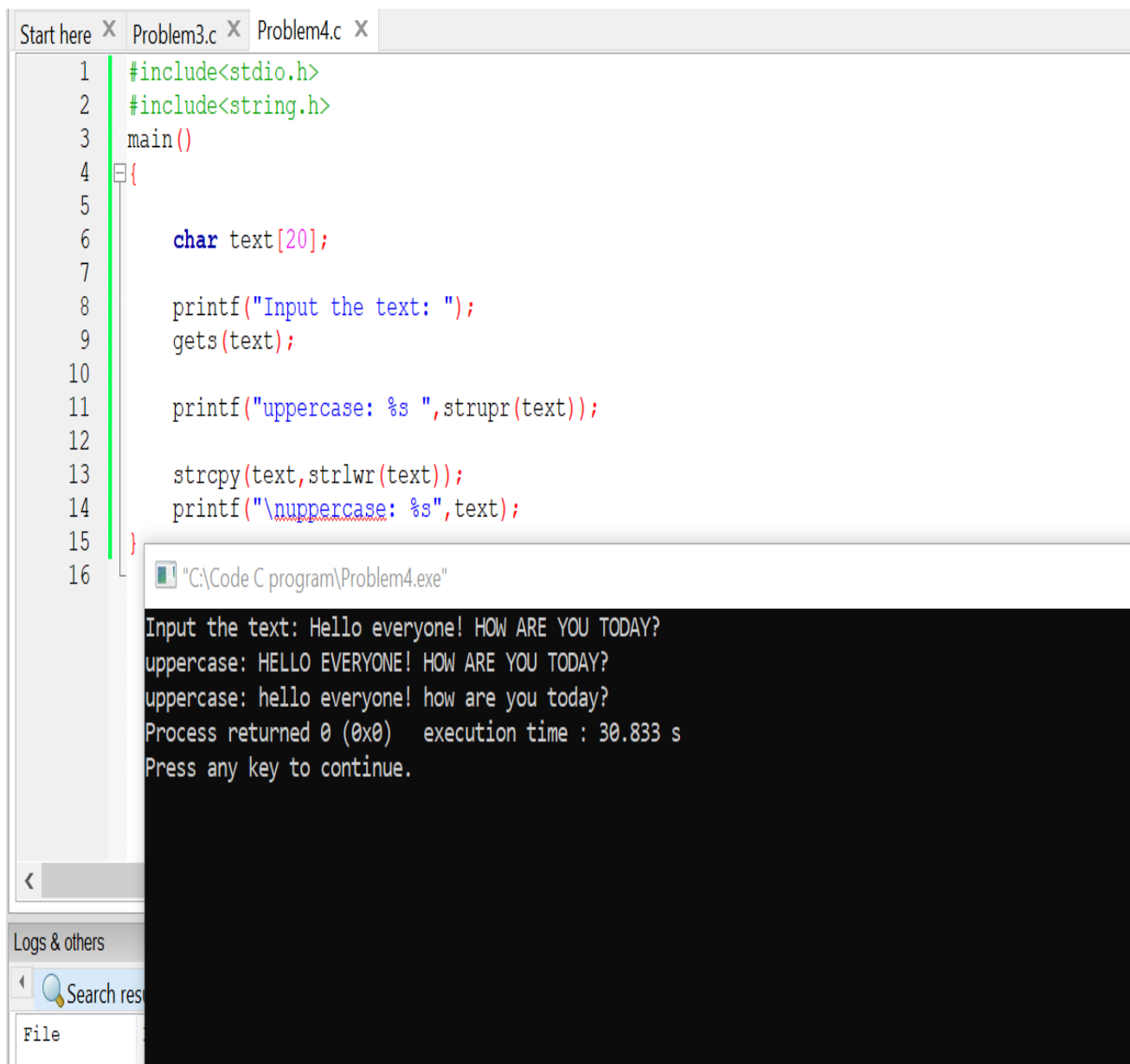
```
1 #include<stdio.h>
2 #include<string.h>
3
4 main()
5 {
6     char firstname[30];
7     int lastindex;
8
9     printf("Input firstname: ");
10    scanf("%s",&firstname);
11
12    lastindex = strlen(firstname) - 1;
13    printf("The first letter is %c and the last letter is %c",firstname[0],firstname[lastindex]);
14
15
16
17
```

The program is executed, and the output is shown in a black window titled '"C:\Code C program\Problem3.exe"'. The output is:

```
Input firstname: Books
The first letter is B and the last letter is s
Process returned 0 (0x0)   execution time : 25.491 s
Press any key to continue.
```

At the bottom of the screenshot, there is a search bar with the text 'logs & others' and a magnifying glass icon next to the word 'Search'.

Problem4. Write a c program to ask a user to input a piece of text. Convert the text to uppercase. Display on screen both the source input and the converted text.



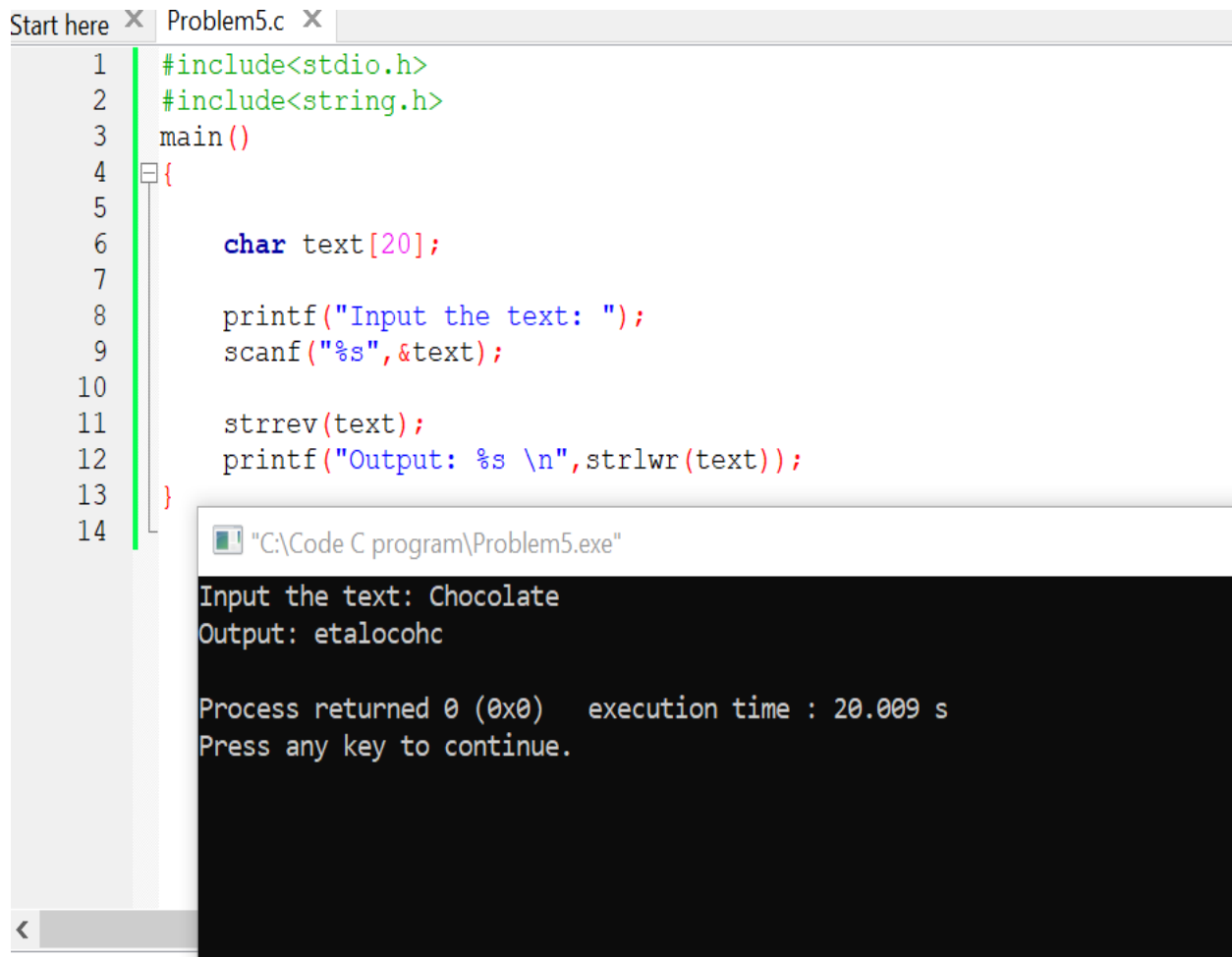
The screenshot shows a code editor with a file named 'Problem4.c' open. The code is a C program that prompts the user for text, converts it to uppercase using `strupr`, and then prints both the original and converted strings. The console window below shows the program's execution with the input 'Hello everyone! HOW ARE YOU TODAY?' and the output 'HELLO EVERYONE! HOW ARE YOU TODAY?'. It also shows the original string being printed again as 'hello everyone! how are you today?'.

```
1 #include<stdio.h>
2 #include<string.h>
3 main()
4 {
5
6     char text[20];
7
8     printf("Input the text: ");
9     gets(text);
10
11     printf("uppercase: %s ",strupr(text));
12
13     strcpy(text,strupr(text));
14     printf("\nuppercase: %s",text);
15 }
16
```

"C:\Code C program\Problem4.exe"

Input the text: Hello everyone! HOW ARE YOU TODAY?
uppercase: HELLO EVERYONE! HOW ARE YOU TODAY?
uppercase: hello everyone! how are you today?
Process returned 0 (0x0) execution time : 30.833 s
Press any key to continue.

Problem5. Ask a user for a string. Convert it to lowercase.



The image shows a code editor window titled 'Problem5.c' with the following C code:

```
1 #include<stdio.h>
2 #include<string.h>
3 main()
4 {
5
6     char text[20];
7
8     printf("Input the text: ");
9     scanf("%s",&text);
10
11     strrev(text);
12     printf("Output: %s \n",strlwr(text));
13 }
14
```

Below the code editor is a console window titled '"C:\Code C program\Problem5.exe"'. It displays the following output:

```
Input the text: Chocolate
Output: etalocohc

Process returned 0 (0x0)   execution time : 20.009 s
Press any key to continue.
```