

UNIVERSITY OF ENGINEERING AND TECHNOLOGY, TAXILA



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*SOFTWARE ENGINEERING*

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**LAB-8 SOLUTION**

SUBMITTED TO : MS.SABA AWAN

SUBMITTED BY : MUHAMMAD ARSALAN

REG NO : 20-SE-56

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# TASK-1

Modify the above program so that user enters a phrase and your program calculates the number of words as well as number of characters in a phrase.  
Output can be like this:

## SOLUTION

The screenshot displays the Code::Blocks IDE with a C++ project named '20-SE-56 LAB-8 TASK-1'. The source file '20-SE-56 LAB-8 TASK-1.cpp' contains the following code:

```
1 #include <iostream>
2 #include <conio.h>
3
4 using namespace std;
5
6 int main(){
7     //defining 2 integer type variables for characters and words count
8
9     int chCount=0, wdCount=0;
10    char ch;
11
12    cout<<"Enter a phrase: ";
13
14    //phrase will complete when user press enter and result will be displayed
15    while(ch!='\r')
16    {
17        ch=getche();
18        //whenever user gives space it means 1 word is counted
19        if(ch==' '){
20            wdCount++;
21        }
22        //else if user dont provide space it will count characters
23        else chCount++;
24    }
25    cout<<"\n Words:"<<wdCount<<1;
26    cout<<"\n Letters:"<<chCount<<1<<endl;
27    getch();
28 }
```

The 'Logs & other' window shows the execution output:

```
----- Run: Debug in 20-SE-56 LAB-8 TASK-1 (compiler: GNU GCC Compiler)-----
Checking for existence: C:\CodeBlocks\projects\20-SE-56 LAB-8 TASK-1\bin\Debug\20-SE-56 LAB-8 TASK-1.exe
Set variable: PATH=C:\CodeBlocks\MinGW\bin;C:\CodeBlocks\MinGW\bin;C:\Program Files (x86)\Common-Files\Intel\Shared Libraries\redist\intel64\compiler;C:\Windows\System32;C:\Windows\System32\cmd;C:\Windows\System32\WindowsPowerShell\v1.0;C:\Windows\System32\OpenSSH;C:\Users\hp\AppData\Local\Microsoft\WindowsApps
Executing: "C:\CodeBlocks\ob_console_runner.exe" "C:\CodeBlocks\projects\20-SE-56 LAB-8 TASK-1\bin\Debug\20-SE-56 LAB-8 TASK-1.exe" (in C:\CodeBlocks\projects\20-SE-56 LAB-8 TASK-1\.)
```

The console window shows the program's execution:

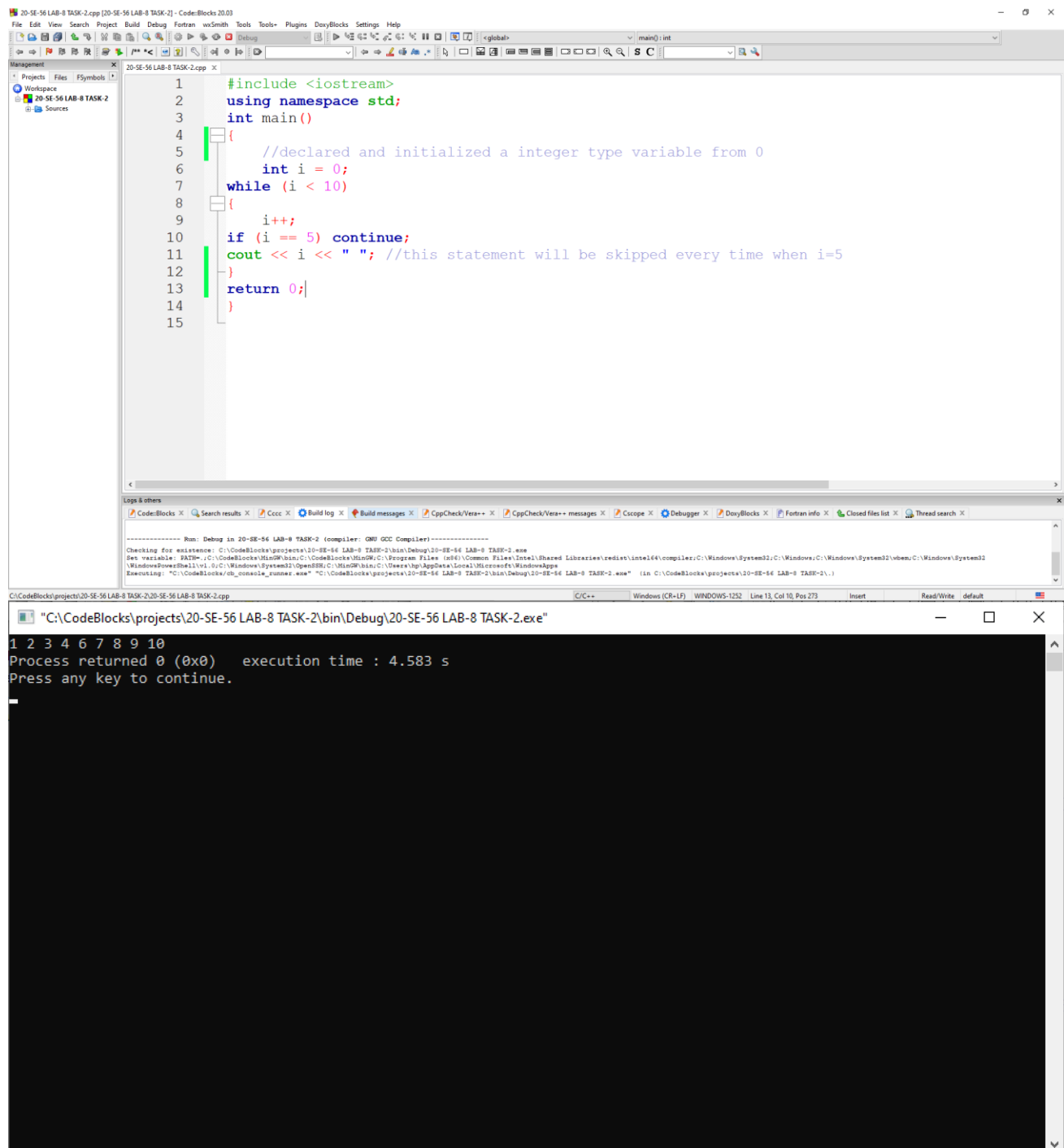
```
C:\CodeBlocks\projects\20-SE-56 LAB-8 TASK-1\bin\Debug\20-SE-56 LAB-8 TASK-1.exe
Enter a phrase: Hello World
Words:2
Letters:10

Process returned 0 (0x0)   execution time : 38.242 s
Press any key to continue.
```

## TASK-2

Create the program that is intended to print every number between 0 and 9 except 5 like given output below using while loop with continue statement.

## SOLUTION



```
1 #include <iostream>
2 using namespace std;
3 int main()
4 {
5     //declared and initialized a integer type variable from 0
6     int i = 0;
7     while (i < 10)
8     {
9         i++;
10        if (i == 5) continue;
11        cout << i << " "; //this statement will be skipped every time when i=5
12    }
13    return 0;
14 }
```

----- Run: Debug in 20-SE-56 LAB-8 TASK-2 (compiler: GNU GCC Compiler)-----  
Checking for existence: C:\CodeBlocks\projects\20-SE-56 LAB-8 TASK-2\bin\Debug\20-SE-56 LAB-8 TASK-2.exe  
Set variable: PATH=C:\CodeBlocks\MinGW\bin;C:\CodeBlocks\MinGW\bin\i686\;C:\Program Files (x86)\Common-Files\Intel\Shared Libraries\redist\intel64\compiler;C:\Windows\System32;C:\Windows;C:\Windows\System32\wbem;C:\Windows\System32\WindowsPowerShell\v1.0;C:\Windows\System32\OpenSSH;C:\MinGW\bin;C:\Users\hp\AppData\Local\Microsoft\WindowsApps  
Executing: "C:\CodeBlocks\ch\_console\_runner.exe" "C:\CodeBlocks\projects\20-SE-56 LAB-8 TASK-2\bin\Debug\20-SE-56 LAB-8 TASK-2.exe" (in C:\CodeBlocks\projects\20-SE-56 LAB-8 TASK-2\.)

C:\CodeBlocks\projects\20-SE-56 LAB-8 TASK-2\bin\Debug\20-SE-56 LAB-8 TASK-2.exe

```
1 2 3 4 6 7 8 9 10
Process returned 0 (0x0)   execution time : 4.583 s
Press any key to continue.
```