

# Lab 01

## Getting Started with C++

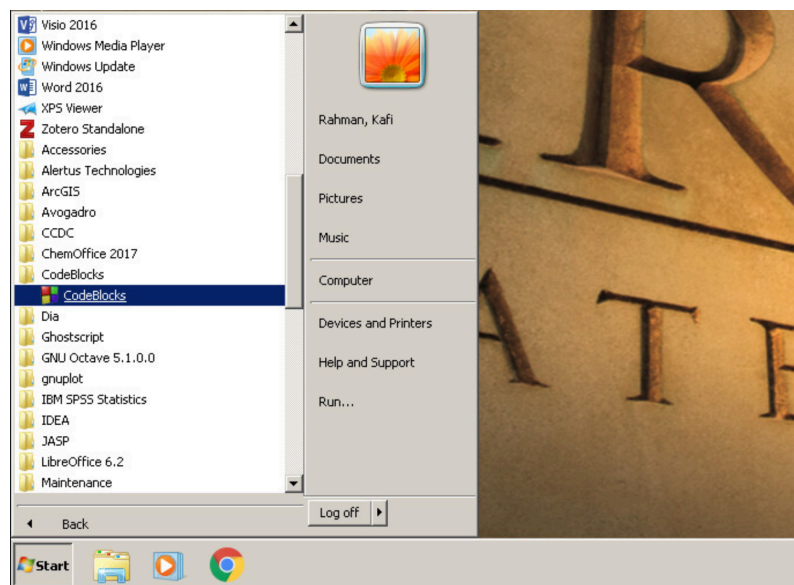
### Introduction

In this course, you will need to write, compile, and run C++ programs. This lab shows you how to do so by using the online Windows 7 image.

### Logging In

Please navigate to the website [view.truman.edu](http://view.truman.edu)

Please select "VMware Horizon View HTML Access" option on the right. Now, use your student credentials in order to login to the virtual image of Windows 7. Select "Windows 7 Virtual Desktop" option to continue. Give it a few seconds so that the virtual operating system can load. Navigate to the StartMenu of the operating system



and "all programs" -> CodeBlocks -> CodeBlocks will start the program.

### Hello World

Now that you are able to log into and log out of ice, the next step is to create and run a C++ program. It is traditional that the first program a you should write in a new language you are learning is a program that prints "Hello, world!" on the screen.

See the attached video to learn how to create a project and run your first C++ "Hello World Program"

## Assignment

The final portion of the lab is to write, compile, run, and finally turn in the C++ program shown below:

```
1 // This program calculates the area of a square
2 #include <iostream>
3 using namespace std;
4
5 int main()
6 {
7
8     cout<<"Welcome! This program calculates the area of a square"<<endl;
9
10    double length, width, area;
11
12    // getting length of the square
13    cout << "Enter the lenght of the square: ";
14    cin >> length;
15
16    // getting the width of the square
17    cout << "Enter the widthe of the square: ";
18    cin >> width;
19
20    // Calculate the area
21    area = length * width;
22
23    // Display the area
24    cout << "The aea of the sqaure is: " << area << endl;
25    return 0;
26 }
```

Using the techniques described above, create a new project. I suggest naming the project either "Lab1SquareArea" so that you can understand the purpose of the program. In the newly created project, rename the file main.cpp to something like "area\_calculator.cpp" (remember, NEVER use spaces in file or directory names!)

Open the cpp file in the Code::Blocks editor, delete all the hello\_world code, and replace it with the code shown above.

There are two significant changes you must make to the code as it is written.

- First, at the top of the program, put your name in a comment, like this:// Kafi Rahman

Otherwise, the code should be exactly the same as shown above.

Once the program is typed in, build it. If there are warning or error messages, read them carefully, noting the line number or numbers which are referenced, fix the errors using the editor, and re-build.

When there are no error or warning messages, run the program. Input 10 for the length and 5 for the width and evaluate whether the calculated total is 50.

By 5pm on Friday, 17 January, submit the C++ source code of the Area-calculating program on the Blackboard website (find the link from the Labs and Assignments category on your left on the Blackboard)

## Additional Notes

Some students will wish to use their own computers for the work in this class. We have attached the "How to configure CodeBlocks.pdf" file with the lab resource file. You can follow the steps from the pdf file to configure your laptop. Please let me know if need help with the installation. Thank you.