Programmer Scavenger Hunt

Welcome to **Computer Programing with C++!** I hope you have a lot of fun!

While you’re waiting, settle down (maybe with some of your new friends) and try out this fun and interactive Programmer Scavenger Hunt!

Go to this website: **http://bit.ly/2cRytzc**

(This shortened link leads to this longer link: <https://github.com/DuffyScottC/TechGirlz-C-Plus-Plus-Workshop-Files#techgirlz-c-plus-plus-workshop-files> ) This website is what we will be using to download example programs and do other important things throughout the entire workshop!

Once you follow the link, find the green “Clone or Download” button. Click that, and select “Download ZIP”. Find the file you just downloaded. If you have to, unzip it by right clicking it and selecting “Extract All”, then press “Extract”. Ta-da! You now have all the files you need to complete this workshop (and to continue learning after today)!

Once you have the file, go inside the folder and find the “*Special Calculator*” file (not the “*Special Calculator - Commented Version*”). Open it up, select all the text inside, and copy and paste the text into your C++ Compiler window. (if you haven’t already, you can find the online compiler at **http://bit.ly/1RwBvaD**, which is a shortened link that leads to this longer link: <http://www.tutorialspoint.com/compile_cpp11_online.php> (check out the “Helpful Links” file so you can copy and paste the links) We will use this compiler for the entire workshop).

Congratulations! You’re now ready to start playing Programmer Scavenger hunt! The things you are told to find and the questions I ask are to help prepare you for the workshop and for your future programming (Don’t worry; you won’t be graded! This is just for you!).

Use the “*Special Calculator - Commented Version*” to see explanations of every element within the program. It explains what every single thing is for. (Don’t paste this one into the compiler, though. It takes too long to load. If you want to run the program, use the uncommented version, named simply “*Special Calculator*”).

Programmer Scavenger hunt!

1. Find the main editor window. What is the code written on line 5? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. What symbol is located next to the “Compile” button? \_\_\_\_\_\_\_\_. What button is to the right of the “Compile” button? \_\_\_\_\_\_\_\_\_\_
3. When you get rid of the text that is in the main window and paste in the “*Special Calculator*” text, what code is written on line 7?

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1. What is the big green section called? \_\_\_\_\_\_\_\_\_\_\_\_\_\_ What text do you see in that section? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Press “Compile”, wait for it to load, then press “Execute”. What do you see in the terminal? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. How many variables are used in this program? \_\_\_
4. How many “if” keywords are there? \_\_\_
5. How many “else” keywords are there? \_\_\_ Compare the number of “if” keywords to “else” keywords.
6. Which type of variable holds “true” or “false” values? \_\_\_\_\_\_\_\_\_\_\_\_
7. What symbol is always right after a “cout” keyword? \_\_\_\_\_\_\_\_\_\_\_
8. What symbol is always right after a “cin” keyword? \_\_\_\_\_\_\_\_\_ Are they the same? Can you guess why?
9. How many lines do NOT have a semicolon (;) on the end? \_\_\_ Can you see anything different about them?

After the Workshop

This workshop is just the beginning! There are resources listed in the Helpful Links file located in the files you downloaded at the beginning of this workshop.

You have already become a programmer! If you would like to learn even more and become a master programmer, there are many more resources online to help you out! Anyone can learn to program. You just did! Here’s a little summary of what you just learned:

Overall Learning Objectives:

* Basic programming concepts!
* Logic statements!
* Input/output!
* Math calculations!
* Program commenting!

Specifics:

* You learned about basic data types like int, double, char, string, and bool!
* You learned how to print text and variables to the console!
* You learned how to receive and handle user input to create interactive programs!
* You learned how to perform math calculations with numbers and variables!
* You learned how to perform logic using if, else-if, and else statements!

You should be proud of yourself! I certainly am! You are so smart! Enjoy the wonderful world of programming!