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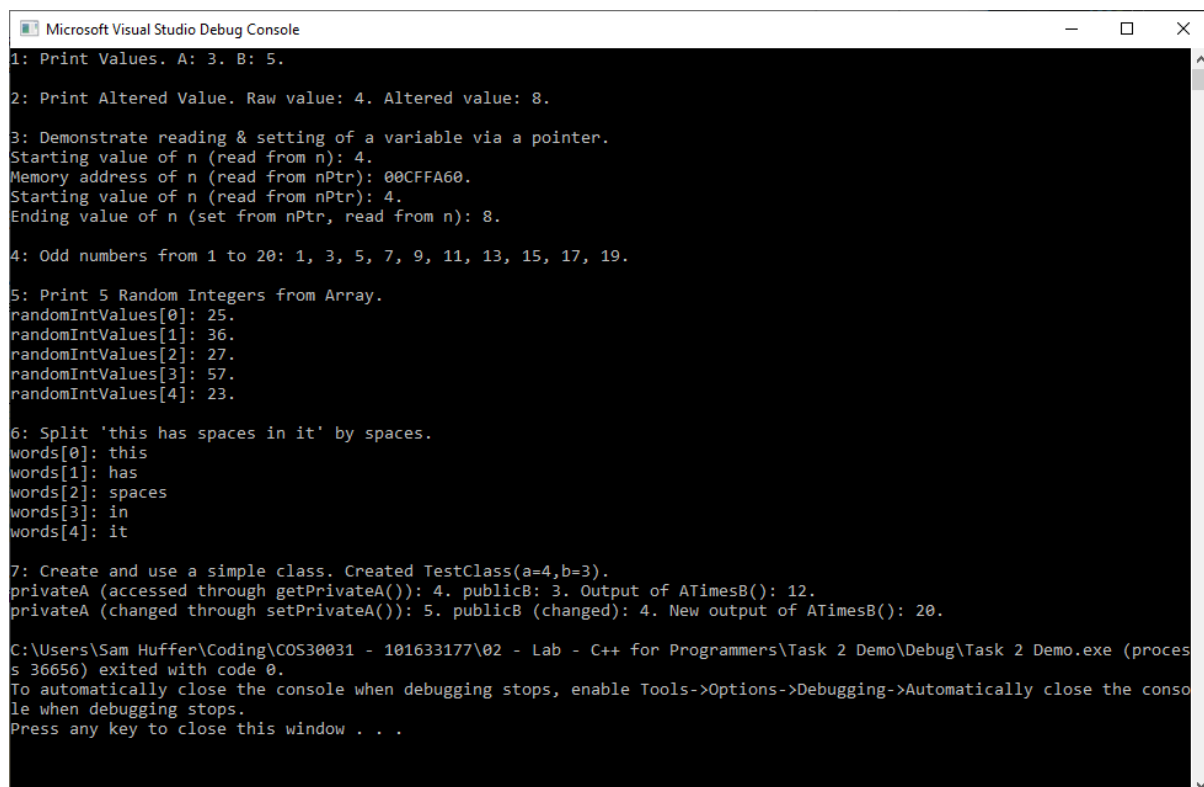
Unit: COS30031 – Games Programming

Task: Task 2 - C++ for Programmers

Date: 6 August, 2019

Tasks Completed:

- Research:
 - C++ Cheat Sheet: <https://www.mokobytes.com/wp-content/uploads/2018/11/C-Cheat-Sheet.pdf>. From the look of it, it provides most of the essentials for how to do stuff in C++. I also downloaded it to the repo in the task 2 folder.
 - Online debugging tool: <http://cpp.sh/>.
 - Keyboard shortcuts for chosen editor: <http://visualstudioshortcuts.com/2017/> outlines a seemingly excessive and complete list of keyboard shortcuts for Visual Studio 2017, the IDE that I'm currently using.
- Additional resources found while completing the coding exercise:
 - <https://stackoverflow.com/questions/4108313/how-do-i-find-the-length-of-an-array> answers how to get the length of an array in C++ (by using the array class rather than C++'s built in array function).
 - <http://www.cplusplus.com/reference/cstdlib/rand/> answers how to generate random integers.
 - <http://www.cplusplus.com/forum/beginner/87238/> answers how to split strings
 - <https://www.codeproject.com/Articles/118921/C-Properties> answers how to do makeshift and proper get/set properties in C++.
- Coding exercise (resulting in the following output to the terminal):



```
Microsoft Visual Studio Debug Console
1: Print Values. A: 3. B: 5.
2: Print Altered Value. Raw value: 4. Altered value: 8.
3: Demonstrate reading & setting of a variable via a pointer.
Starting value of n (read from n): 4.
Memory address of n (read from nPtr): 00CFFA60.
Starting value of n (read from nPtr): 4.
Ending value of n (set from nPtr, read from n): 8.
4: Odd numbers from 1 to 20: 1, 3, 5, 7, 9, 11, 13, 15, 17, 19.
5: Print 5 Random Integers from Array.
randomIntValues[0]: 25.
randomIntValues[1]: 36.
randomIntValues[2]: 27.
randomIntValues[3]: 57.
randomIntValues[4]: 23.
6: Split 'this has spaces in it' by spaces.
words[0]: this
words[1]: has
words[2]: spaces
words[3]: in
words[4]: it
7: Create and use a simple class. Created TestClass(a=4,b=3).
privateA (accessed through getPrivateA()): 4. publicB: 3. Output of ATimesB(): 12.
privateA (changed through setPrivateA()): 5. publicB (changed): 4. New output of ATimesB(): 20.
C:\Users\Sam Huffer\Coding\COS30031 - 101633177\02 - Lab - C++ for Programmers\Task 2 Demo\Debug\Task 2 Demo.exe (process 36656) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```