

CS 261 – Assignment 0, Part 1

My name is Jason Goldfine-Middleton. Born and raised in San Diego, I attended UC San Diego for my undergraduate program. I majored in Political Science: International Relations and minored in Mathematics. When I began my time at college, I did not give a whole lot of consideration to what career I would ultimately like to pursue. About halfway through my time there, I started to think I might prefer a job as a high school math teacher to anything related to political science. After spending some time shadowing a 6th grade math teacher at a local public school, I became discouraged by certain aspects of the school system, not least the lack of attention given to students who were falling through the cracks. After I graduated, I decided to instruct students individually, where I felt that I would be able to make a bigger difference. For the last four years I have served as a private tutor of mathematics, physics, and introductory computer science for high school and college students.

My hobbies are fairly simple, as I am a simple guy at heart. I enjoy listening to different types of music, exploring nature and travelling to beautiful places, hanging out at the beach, spending meaningful time with friends, philosophizing, and learning. I find that I am not a very artistic person, although I do enjoy reading and writing. I like solving problems, especially in math and computer science.

My first exposure to programming was a computer science course I took during senior year of high school. We used Java and learned the basics of object-oriented programming, as well as fundamental features of programming languages. I really enjoyed programming but did not realize I might want to make a career out of it. Looking back on it, I now find that very strange. As I was finishing up my time at UCSD, I decided to take a couple of introductory programming classes. These were also in Java and I enjoyed them. I came to appreciate the importance of external libraries. While I was still at college, I tinkered a lot with Linux and developed a passion for operating systems and virtualization. Over the last four years, I have taught myself new things out of personal interest, such as HTML, CSS, Bash scripting, VIM, Eclipse, Xcode, basic server administration, data structures and algorithms, more Java, and Swift. I am fairly rusty with many of these things, but the initial exposure should make them easy to learn in the future. One major project I have worked on is a Portuguese verb conjugator. The genesis of that idea was to combine an interest in Portuguese with a desire to learn how to build larger programs. Ultimately, I have a fully-featured console application in both Java and Swift.

Oregon State University's post-bacc CS program was like a godsend. I had searched for master's CS programs that would admit students coming from a non-engineering background but realized that it would be quite an uphill battle to complete all the prerequisites. Additionally, I was concerned that if I started at the master's level, I would be missing many of the fundamentals. Therefore, this program seemed to be the perfect fit because in addition to resolving those issues, the curriculum was up-to-date and targeted to those planning to find jobs immediately after completion.

Ultimately, I do not have a specific goal in mind in terms of what I would like to work on in the industry, but I do know that I would like to make a positive difference in the world. There are many ways I can do that, and I think going through this post-bacc program will allow me to explore many of the sub-fields of computer science. In the long-term, I would like a job that I can do remotely, so that I will be free to live wherever seems best. Having recently attended the OSU Career Showcase in Portland, I realized that I should try to figure out what aspects of my education I enjoy the most and focus on deepening my understanding of those things. To be honest, working on operating systems seems like my dream job at the moment. An operating system is like the ocean, where all other applications and programs are fish

that swim in it. It would be fascinating and rewarding to work on the foundation of software. I am open to research in this field, although without getting too theoretical and hypothetical to make changes in software then and there.

I look forward to another exciting term here at Oregon State University and I look forward to working with and learning from you and my peers.

More Details on Programming Experience:Languages:

Programming Language	Experience (years)	Platforms Used	Build Environments
Java	10	Windows, OS X, Linux	CLI, Eclipse
Swift	1.5	OS X	Xcode
C	0.25	Windows, OS X, Linux	CLI, Eclipse, Xcode, VS
C++	0.5	Windows, OS X, Linux	CLI, Eclipse, Xcode, VS
C#	0.25	Windows	VS
Bash	2	OS X, Linux	CLI
HTML	1	OS X	Various
CSS	1	OS X	Various

Coursework:

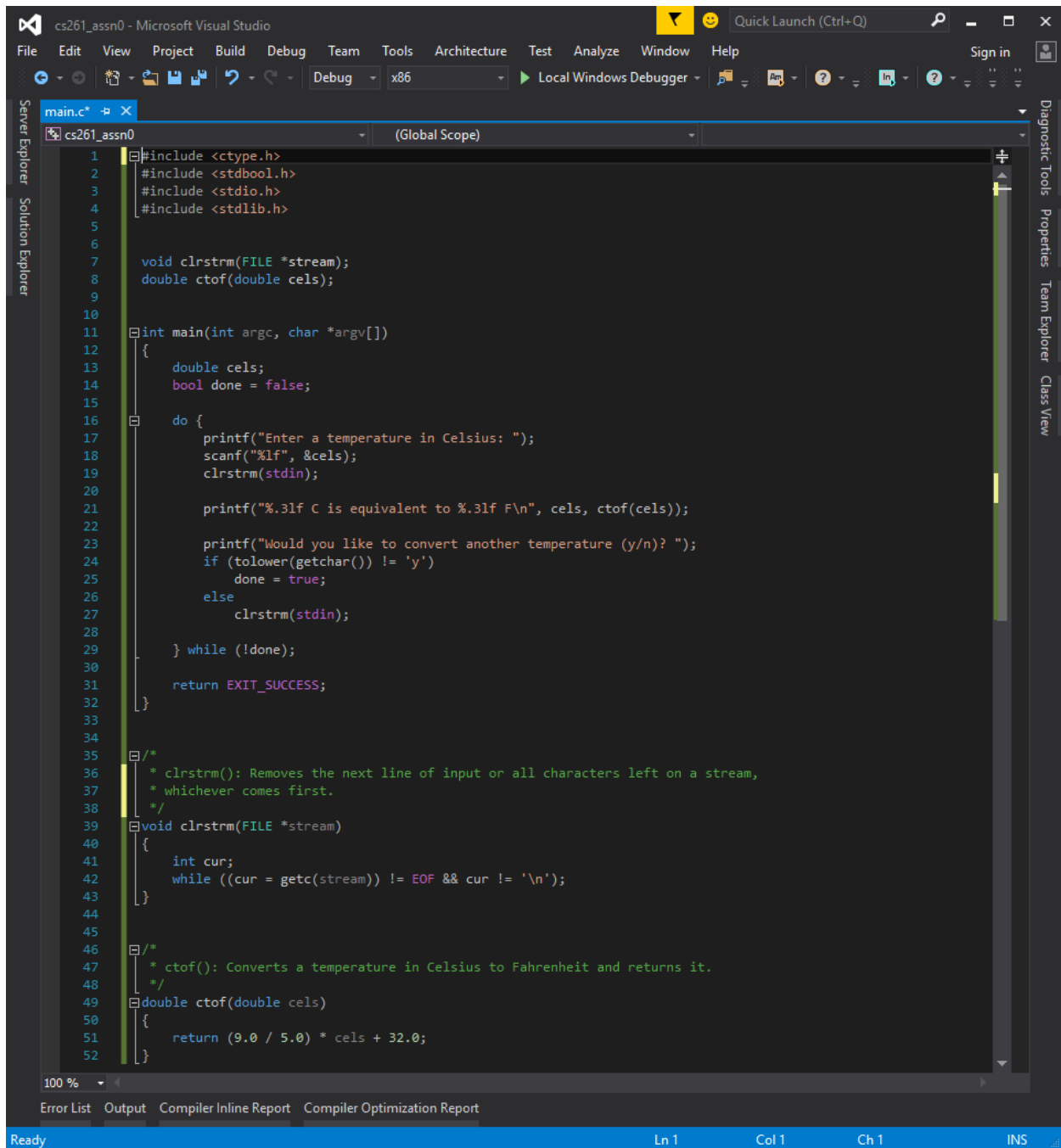
Intro to Computer Science (UCSD)

Data Structures (UCB – unofficial)

Intro to Computer Science I and II (OSU)

Discrete Structures (OSU)

CS 261 – Assignment 0, Part 2



```
1  #include <ctype.h>
2  #include <stdbool.h>
3  #include <stdio.h>
4  #include <stdlib.h>
5
6
7  void clrstrm(FILE *stream);
8  double ctof(double cels);
9
10
11 int main(int argc, char *argv[])
12 {
13     double cels;
14     bool done = false;
15
16     do {
17         printf("Enter a temperature in Celsius: ");
18         scanf("%lf", &cels);
19         clrstrm(stdin);
20
21         printf("%.3lf C is equivalent to %.3lf F\n", cels, ctof(cels));
22
23         printf("Would you like to convert another temperature (y/n)? ");
24         if (tolower(getchar()) != 'y')
25             done = true;
26         else
27             clrstrm(stdin);
28     } while (!done);
29
30     return EXIT_SUCCESS;
31 }
32
33
34
35 /*
36  * clrstrm(): Removes the next line of input or all characters left on a stream,
37  * whichever comes first.
38  */
39 void clrstrm(FILE *stream)
40 {
41     int cur;
42     while ((cur = getc(stream)) != EOF && cur != '\n');
43 }
44
45
46 /*
47  * ctof(): Converts a temperature in Celsius to Fahrenheit and returns it.
48  */
49 double ctof(double cels)
50 {
51     return (9.0 / 5.0) * cels + 32.0;
52 }
```

```
C:\WINDOWS\system32\cmd.exe
Enter a temperature in Celsius: 100
100.000 C is equivalent to 212.000 F
Would you like to convert another temperature (y/n)? y
Enter a temperature in Celsius: 0.0
0.000 C is equivalent to 32.000 F
Would you like to convert another temperature (y/n)? y
Enter a temperature in Celsius: -40
-40.000 C is equivalent to -40.000 F
Would you like to convert another temperature (y/n)? n
Press any key to continue . . .
```

```
access.engr.orst.edu - PuTTY
-bash-4.1$ ./main
Enter a temperature in Celsius: 100
100.000 C is equivalent to 212.000 F
Would you like to convert another temperature (y/n)? y
Enter a temperature in Celsius: 0.0
0.000 C is equivalent to 32.000 F
Would you like to convert another temperature (y/n)? y
Enter a temperature in Celsius: -40
-40.000 C is equivalent to -40.000 F
Would you like to convert another temperature (y/n)? n
-bash-4.1$
```