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Module I  
170D WOBC Module I Practical 2A – Websters Write Up  
Due Date: 08 September, 2022

### **Project Summary:**

This practical required students to write a dictionary program that prompts a user to enter up to ten word/definition combinations. The program would store the combination and ask the user to enter a word and produce the full definition for that word. Afterwards, the program would create and write the completed definitions to a text file named my\_dictionary.txt

### **Challenges:**

Memory allocation – Although this project did not require allocating memory, I wanted to learn practice by using it. I have never worked with allocation and of course once my program was complete, there were plenty of memory leaks. By forcing myself to do this, I learned a lot through trial and error. I am no expert, but it was extremely challenging.

C Syntax and Logic – C really forced me to understand every line of code I wrote. The learning curve for pointers, pointer to pointers, passing arguments to and from self-created functions, and understanding exactly what the program was doing was difficult. However, this program did motivate me to study hard and learn concepts not yet introduced.

### **Successes:**

Loops and User Input – I tried incorporating loops and prompting the user until they decided to exit specific sections of the program. At first, it was challenging, but once I understood logic in C, I was able to use it effectively.

Makefile – I was able to use Makefile with multiple files effectively from the beginning with this project. Once I had a solid frame to work with, the Makefile was effective for compiling files quickly, debugging, and reviewing the performance through the profile target.

### **Lessons Learned:**

There were many lessons learned throughout this project. A lot of frustration, but I was able to manage my time effectively through research and understanding fundamentals rather than trying to write the code and debug it later on. It is essential to understand what the program is actually doing and how to use its tools properly. I read a lot about concepts and reviewed code online to understand sections that were foreign to me.