**CMSC 204**

**ASSIGNMENT 4 | LEARNING EXPERIENCE**

I learned the concept of Hashing from this assignment. Hashing allows to get an item from a very large in a short time. For example, if we have an array of over million items, hashing allows us to get a specific item very quickly elements by predicting where the element would be instead of searching through each array elements.

In this assignment, we were required to create a database of Courses and find a course from the database with the CRN number. To do that I converted the CRN number to string to get the hash code of the CRN. We were not told the number of items to be inserted in the CourseDBStructure. So, I was confused on setting a starting table size in the CourseDBManager. Finally, I chose 100, even though it might not be ideal for conserving memory.

I used to refer to the Javadoc provided to us in our previous projects while writing my codes, but we were provided a UML diagram for this assignment. Following the design made this assignment a lot easier than previous assignnments as I did not have to come up with my own design.