**CSE 503**

**Summer 2025**

**Please do the following problems**:

1. Starting with the code for Hash Table example (hash.cpp)
   1. Write your own main and insert function to insert the sequence of integers {138, 99, 16, 134, 42, 0, 6, 9, 4, 53, 47, 66} using a table of size 17. (You may need to fix other existing functions like “get” to avoid infinite loops during rehashing).
   2. Implement your own rehashing algorithm of choice and run the same sequence of input using a table of size 7. (Make sure to implement rehashing with load factor).

**Turn-ins:**

All source code and report (pdf) zipped.

**Please remember:**

All assignments and tests must be submitted on Blackboard.

All computer assignments and projects need to be written in C++ and will be submitted as follows:

1. **Visual Studio is not allowed *(IMPORTANT).***  You must use an IDE that allows you to compile and run individual C++ files. You may use Bloodshed Compiler from the link:

<http://www.bloodshed.net/dev/devcpp.html>

or any other similar environment. For linux/unix/mac users, you may use any text editor of your choice and the c/c++ compiler that comes with your system such as gcc.

1. All reports must be submitted as a **PDF** report that contains:
   1. Title page with your name, assignment number and the day you are actually submitting this report (Not the assignment due date)
   2. A brief description of the assignment.
   3. A brief description of the logic employed and the needed input and expected output.
   4. A comprehensive set of snapshots showing the inputs submitted, outputs obtained in the case of a successful output or a failure.
   5. Any conclusions, analysis, or answers to any questions asked as part of the assignment.
   6. A text file that contains all source code.
   7. Please zip both the PDF document and the source code and submit one zip file.