## Northern Michigan University (Marquette Co, MI) CS 522-01-23W: Principles Of Programming Languages

Assignment 3 Due: Wednesday 27 February 2023 2:00 P.M. EST

Create a directory called "HW3" at the top level of your CS522-01-23W folder on PHILOS. You should solve this problem in either a text file (.txt) or an MS Word file (.docx). Place this file inside your HW3 folder along with an empty file or folder named DONE.

From the textbook do

Exercise 1, p. 89

Exercise 1-2 p. 90

Exercise 1-5 p. 99

Prove that over the alphabet  $\Sigma = \{a,b\}$  that the language  $\{ww \mid w \in \Sigma^*\}$  is not context-free. (The language consisting of all strings of even length whose first half exactly matches the second-half: aa, booboo, etc.)