

Northern Michigan University (Marquette Co, MI)

CS 522-01-25W: Principles Of Programming Languages

Assignment 3

Due: Wednesday 12 March 2025 11:00 A.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. W is defined as a function of w such that every symbol of w is doubled in W . So, the language contains $abaabb$ or $abbbaabbbbaa$.