

CS 3713-01 Homework #1

Due January 27, 2020

Assignment

Create a regular expression to define each of these languages.

1. Hexadecimal constants as in C++. Include a definition of the alphabet.
2. Valid identifiers as in C++. Include a definition of the alphabet.
3. Over the alphabet $\{a, b\}$, all strings with an even number of b's.
4. Over the alphabet $\{a, b\}$, all strings that contain at least two a's and at most one b.
5. Over the alphabet $\{a, b\}$, all strings exactly two characters long.