PRACTICAL EXERCISE
JFLAP SESSION 3

It is required to determine the Push-Down Automata (PDA) and Turing Machines (TM) required for solving the following problems using JFLAP. You can consult detailed information about how to use JPLAP to work with these abstract machines in Aula Global 2.

1. Given the alphabet of input symbols {a,b,c}. Construct a PDA to recognize strings for which the number of a's is twice the number of c's.

2. Given the alphabet of input symbols {1,0}. Construct a PDA to recognize sentences containing the same number of substrings "101" equal to the number of substrings "010".

3. Given the alphabet of input symbols {1,2,3}. Design a TM to find substrings "1221" into the input string and replace them by "1331".

For each one of the 3 DFAs, use the editor and the option **Input** > **Multiple Run** to include 5 words recognized by the designed PDAs or TM and 5 words non-recognized.