1. Using Theorem 7.1 and JFLAP construct an npda that accepts the language generated by the grammar

   $$S \rightarrow aSbb \mid aab$$

2. Again using Theorem 7.1 and JFLAP construct an npda that accepts language generated by the grammar

   $$S \rightarrow aSSS \mid ab$$

3. Is the language $$L = \{a^n b^{2n} c^n \mid n \geq 1\}$$ deterministic? If so using JFLAP construct a dpda that accepts the language; otherwise give a reason why it’s not.