

Handout 6: Problem Set 6

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Due by Wednesday, Dec 25th, 4pm.

- 1 Write a careful proof that every cfl over a one symbol alphabet is regular.
- 2 Describe a pushdown automaton that accepts the set $\{a^i b^j c^k | j \geq i + k\}$
- 3 Convert

$$A_1 \rightarrow A_2 A_3$$

$$A_2 \rightarrow A_3 A_1$$

$$A_3 \rightarrow A_1 A_2$$

$$A_3 \rightarrow a$$

to Greibach normal form.