Formal Languages and Automata Theory, SS 2017. Homework 4 (due Week 5)

1. Construct finite automata equivalent to the grammars of type 3 from Homework 1 (`https://merascu.github.io/links/SS2018FLAT/FLATHW1.pdf`), exercise 2.

2. Construct finite automata recognizing the following languages:

   (a) $L = \{PSDR, PNL, PUNR\}$

   (b) $L = \{w | w \text{ is a binary string ending in } 1\}$

   (c) $L = \{w | w \text{ is an identifier in C language}\}$

   (d) $L = \{w | w \text{ is an integer constant with sign in C language}\}$

   (e) $L = \{w | w \in \{0,1\}^* \text{ and } w \text{ is a multiple of } 3\}$

   (f) $L = \{a^i b^j | i, j > 0\}$

   (g) $L = \emptyset$