Formal Languages and Automata Theory, SS 2018. Homework 3 (due Week 4)

1. Devise grammars generating the following languages:

   (a) $L = \{\lambda\}$
   (b) $L = \emptyset$
   (c) $L = \{0^n | n \in \mathbb{N}\}$
   (d) $L = \{a^i b^j a^i b^j\}$
   (e) $L = \{awbbw' | w, w' \in \{0,1\}^*\}$
   (f) $L = \{w | w$ real constant in C programming language$\}$
   (g) $L = \{w \in \{0,1\}^* | w$ contains maximum 2 zeros$\}$
   (h) $L = \{wa\tilde{w} | w \in \{0,1\}^*\}$
   (i) $L = \{w | w$ is a byte representing an even number$\}$
   (j) $L = \{A, B, ..., Z\}$