HW 7.

1. Use the proof by construction process (shown in Lemma 2.21 on Page 115) to construct a PDA for the following grammars:

   (a) \( S \rightarrow S + T | T \)
   \( T \rightarrow T \ast a | a \)

   (b) \( S \rightarrow aS | bSS | SSb | SbS \)

2. For the following PDA's, write the corresponding CFG using the proof by construction (shown in Lemma 2.27 on Page 119)