3. Suppose that L is language over an alphabet Σ. Suppose that there is a deterministic pushdown automaton that accepts L. Show that L is deterministic context-free. That is, show how to construct a deterministic pushdown automaton that accepts the language $L\$$. (Assume that the symbol $ is not in Σ.)

5. Show that the language $\{a^n b^m \mid n \neq m\}$ is deterministic context-free.