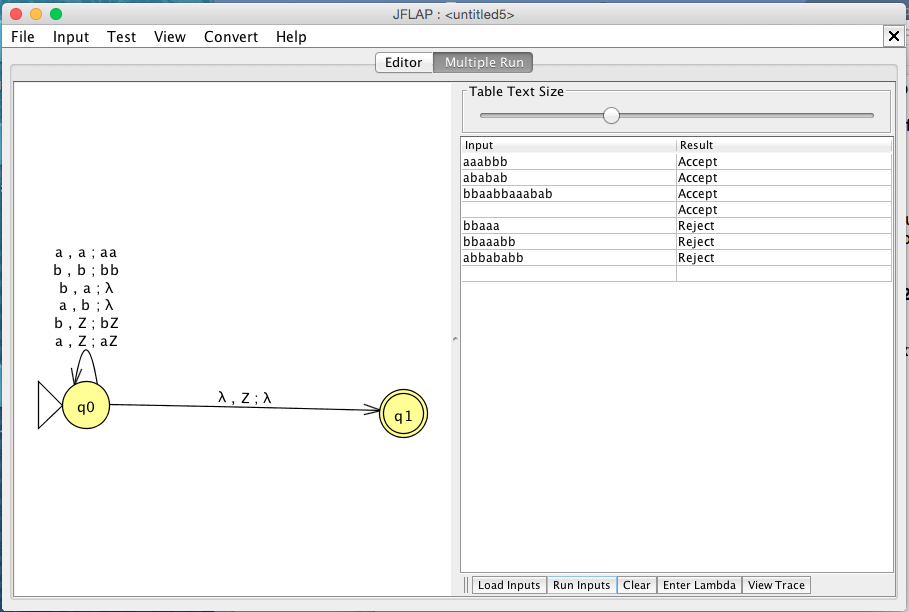
The given language is *non-deterministic* because of the last transition , which according to **definition 7.3’s second property** states that:

“if occurs in some M, then .“

However, the automaton given in Example 7.4, as in all automaton, must initialize the stack with a Z, this means that there cannot exist another without becoming ­*non-deterministic*. Since we see it twice, there is a contradiction with our definition, making the it an *NPDA,* but the language itself can be expressed as a *DPA.*

Therefore, we see that it is *non-deterministic*, because it has broken the second property of *determinism* for automaton that represent *context-free-languages*.

We can fix it simply, however, by changing the last transition from )} ***to*** )}.



∴ *DPDA* to express the given *NPDA.*