Push Down Automata

$L = \{a^n b^n : n \geq 0\}$.

PDA: $(\{q_0, q_1, q_2\}, \{a, b\}, \{a, Z_0\}, \delta, q_0, Z_0, \{q_2\})$.

$\delta(q_0, a, Z_0) = (q_0, aZ_0)$
$\delta(q_0, a, a) = (q_0, aa)$
$\delta(q_0, \epsilon, a) = (q_1, a)$
$\delta(q_0, \epsilon, Z_0) = (q_2, \epsilon)$
$\delta(q_1, b, a) = (q_1, \epsilon)$
$\delta(q_1, \epsilon, Z_0) = (q_2, \epsilon)$