

**PONTIFÍCIA UNIVERSIDADE CATÓLICA DE MINAS GERAIS
ARQUITETURA E ORGANIZAÇÃO DE COMPUTADORES II
CIÊNCIA DA COMPUTAÇÃO - 3º PERÍODO**



PUC Minas

AUTÔMATOS DE PILHA - EXERCÍCIOS 24-05

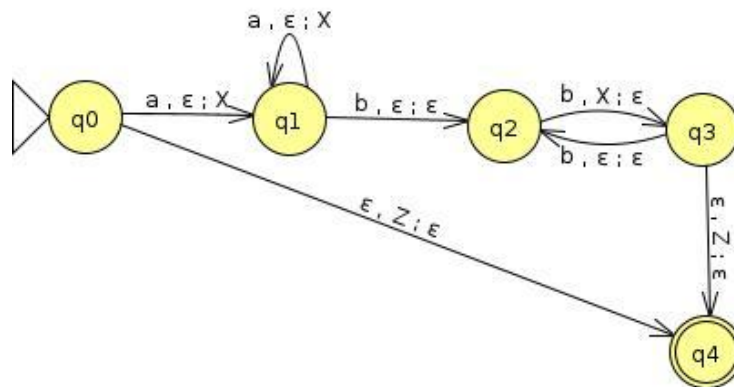
**ANDRÉ FONSECA DE PAIVA
DEBORAH DALONSO FREDERICO
LUCAS DE GODOI MORAES
LUCAS OMAR ANDRADE LEAL**

POÇOS DE CALDAS - MG

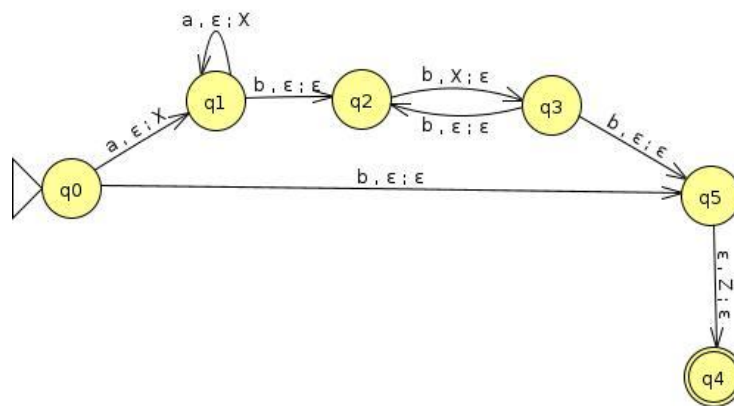
2021

1. Construa Autômatos de Pilha que reconheçam as linguagens abaixo.

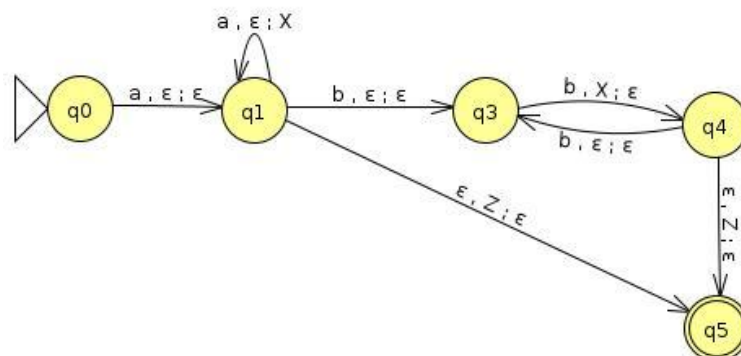
a. $L = a^n b^{2n} / n \geq 0$



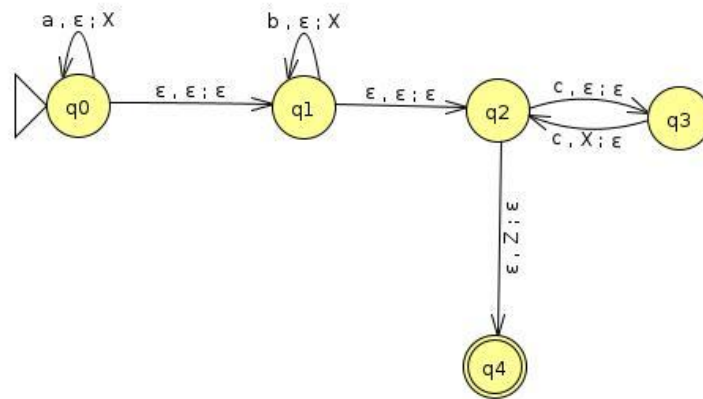
b. $L = a^n b^{2n+1} / n \geq 0$



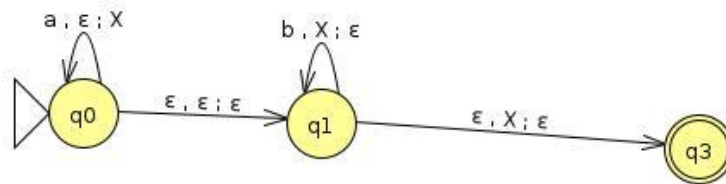
c. $L = a^{n+1} b^{2n} / n \geq 0$



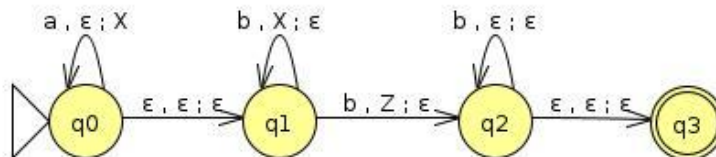
d. $L = a^n b^m c^{2(m+n)} / n, m \geq 0$



e. $L = a^n b^m / n > m \text{ e } n, m \geq 0$



f. $L = a^n b^m / n < m \text{ e } n, m \geq 0$



2. Quais as 3 primeiras palavras que esse linguagem gera

a. $L = a^n b^{2n} / n \geq 0$

- $\epsilon / abb / aabbbb$

b. $L = a^n b^{2n+1} / n \geq 0$

- $b / abbb / aabbbbb$

c. $L = a^{n+1} b^{2n} / n \geq 0$

- $a / aabb / aaabbbb$

d. $L = a^n b^m c^{2(m+n)} / n, m \geq 0$

- $\epsilon / acc / bcc$

e. $L = a^n b^m / n > m \text{ e } n, m \geq 0$

- $a / aa / aaa$

f. $L = a^n b^m / n < m \text{ e } n, m \geq 0$

- $b / bb / bbb$