

Trabalho 2

1. Implemente o algoritmo CYK para gramáticas livres de contexto. Teste seu programa com as gramáticas livres de contexto a seguir:

(a)  $F \rightarrow AB \mid AC \mid p \mid q \mid r \mid s$

$$B \rightarrow FD$$

$$D \rightarrow EG$$

$$E \rightarrow \&$$

$$C \rightarrow HG$$

$$G \rightarrow FI$$

$$A \rightarrow ($$

$$I \rightarrow )$$

$$H \rightarrow \sim$$

(b)  $D \rightarrow AB$

$$B \rightarrow HC$$

$$A \rightarrow \langle \text{html} \rangle \langle \text{head} \rangle \langle \text{title} \rangle \text{teoria} \langle \text{title} \rangle \langle \text{head} \rangle \langle \text{body} \rangle$$

$$C \rightarrow \langle \text{body} \rangle \langle \text{html} \rangle$$

$$H \rightarrow IH \mid EF \mid \text{teoria}$$

$$E \rightarrow \langle \text{ul} \rangle$$

$$K \rightarrow \langle \text{ul} \rangle$$

$$F \rightarrow MK$$

$$I \rightarrow EF \mid \text{teoria}$$

$$M \rightarrow MO \mid GN$$

$$O \rightarrow GN$$

$$N \rightarrow HP$$

$$G \rightarrow \langle \text{li} \rangle$$

$$P \rightarrow \langle \text{li} \rangle$$

em que o conjunto de terminais é  $\{\langle \text{body} \rangle \langle \text{html} \rangle, \langle \text{ul} \rangle, \langle \text{ul} \rangle, \langle \text{li} \rangle, \langle \text{li} \rangle, \text{teoria}, \langle \text{html} \rangle \langle \text{head} \rangle \langle \text{title} \rangle \text{teoria} \langle \text{title} \rangle \langle \text{head} \rangle \langle \text{body} \rangle\}$ .