



Date / /

COMPILADORES

Junio Abril 14, 2023

4.8

$S \rightarrow Aa$

Firsts

$A \rightarrow BD$

$S \{A, \} = \{a, b, d, \epsilon\}$

$B \rightarrow b$

$A \{B, D\} = \{b, d, \epsilon\}$

$B \rightarrow \epsilon$

$B \{b, \epsilon\} = \{b, \epsilon\}$

$D \rightarrow d$

$D \{a, \epsilon\} = \{d, \epsilon\}$

$D \rightarrow \epsilon$

Follows

$A = \{a\} = \{a\} = \{a\}$

$B = \{D, A\} = \{ \} = \{ \text{first}(D), \text{follow}(A) \}$

$D = \{A\} = \{a\} = \{ \text{follow}(A) \}$

$S = \{ \} = \{ \} = \{ \}$

$\therefore A = \{a\}$

$B = \{d, a\}$

$D = \{a\}$

$S = \{ \}$

$$S' \rightarrow S$$

$$I_0: S' \rightarrow S$$

$$\textcircled{1} S \rightarrow Aa$$

$$S \rightarrow \cdot Aa$$

$$\textcircled{2} A \rightarrow BD$$

$$A \rightarrow \cdot BD$$

$$\textcircled{3} B \rightarrow b$$

$$B \rightarrow \cdot b$$

$$\textcircled{4} B \rightarrow \epsilon$$

$$B \rightarrow \epsilon \cdot$$

$$\textcircled{5} D \rightarrow d$$

$$\textcircled{6} D \rightarrow \epsilon$$

$$I_1 (I_0 \text{ en } S)$$

$$I_5 (I_2 \text{ en } a)$$

$$S' \rightarrow S.$$

ACCEPTED,,

$$S \rightarrow Aa.$$

$$I_2 (I_0 \text{ en } A)$$

$$I_6 (I_3 \text{ en } D)$$

$$S \rightarrow A \cdot a$$

$$A \rightarrow BD.$$

$$I_3 (I_0 \text{ en } B)$$

$$I_7 (I_3 \text{ en } d)$$

$$A \rightarrow B \cdot D$$

$$D \rightarrow d.$$

$$D \rightarrow \cdot d$$

$$D \rightarrow \epsilon \cdot$$

$$I_4 (I_0 \text{ en } b)$$

$$B \rightarrow b.$$



ACTIONS

Date

GOTO

a

b

d

EDS \$

S

A

B

D

0

34

1

2

3

1

acc

2

85

3

57

6

4

r3

r3

5

r1

6

r2

7

r5

(wda)

Stack

Input

Action

S0

bacc\$

54

S004

da\$

r3 (B → b)

S0B

da\$

GOTO 3

S0B3

da\$

57

S0B3d7

a\$

r5 (D → d)

S0B3D

a\$

GOTO 6

S0B3D6

a\$

r2 (A → BD)

S0A

a\$

GOTO 2

S0A2

a\$

55

S0A2a5

\$

r1 (S → Aa)



Date

/ /

Stack

Input

Action

SOS

\$

Goto 1

SOS1

\$

Accepted //

(dba)

Stack

Input

Action

S0

dba\$

Error //