Construir la tabla de parsing LALR(1) de:

$S \longrightarrow CC$

$C \longrightarrow cC$

$C \longrightarrow d$

Construir la tabla de parsing LALR(1) de:

1) Agregar una nueva producción inicial que llegue al simbolo inicial.

2) Enumerar desde cero las reglas de la gramática.

(0) $S' \longrightarrow S$
(1) $S \longrightarrow CC$
(2) $C \longrightarrow cC$
(3) $C \longrightarrow d$

3) Construir el Autómata de Prefijos Viables basado en los items LR(1)

$[S' \to \cdot\, S, \$]$ I_0

$[S' \rightarrow \cdot S, \$]$ I_0

A = S’
α = λ
B = S
β = λ
a = $

FIRST(βa) = FIRST(λ$) = {$}

I_0

$[S' \rightarrow \cdot S, \$]$
$[S \rightarrow \cdot CC, \$]$

A = S’
α = λ
B = S
β = λ
a = $

FIRST(βa) = FIRST(λ$) = {$}

I_0

$[S' \to \cdot S, \$]$
$[S \to \cdot CC, \$]$

I_0

$[S' \rightarrow \cdot S, \$]$
$[S \rightarrow \cdot CC, \$]$

A = C
α = λ
B = C
β = C
a = $

FIRST(βa) = FIRST(C$) = {c,d}

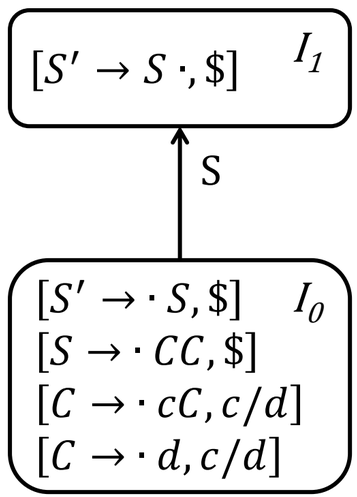
$[S' \rightarrow \cdot S, \$]$ I_0
$[S \rightarrow \cdot CC, \$]$
$[C \rightarrow \cdot cC, c/d]$
$[C \rightarrow \cdot d, c/d]$

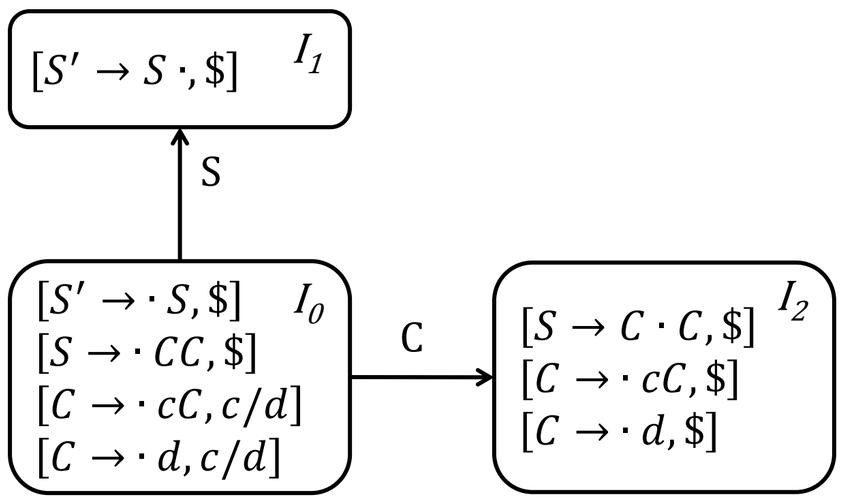
A = C
α = λ
B = C
β = C
a = $

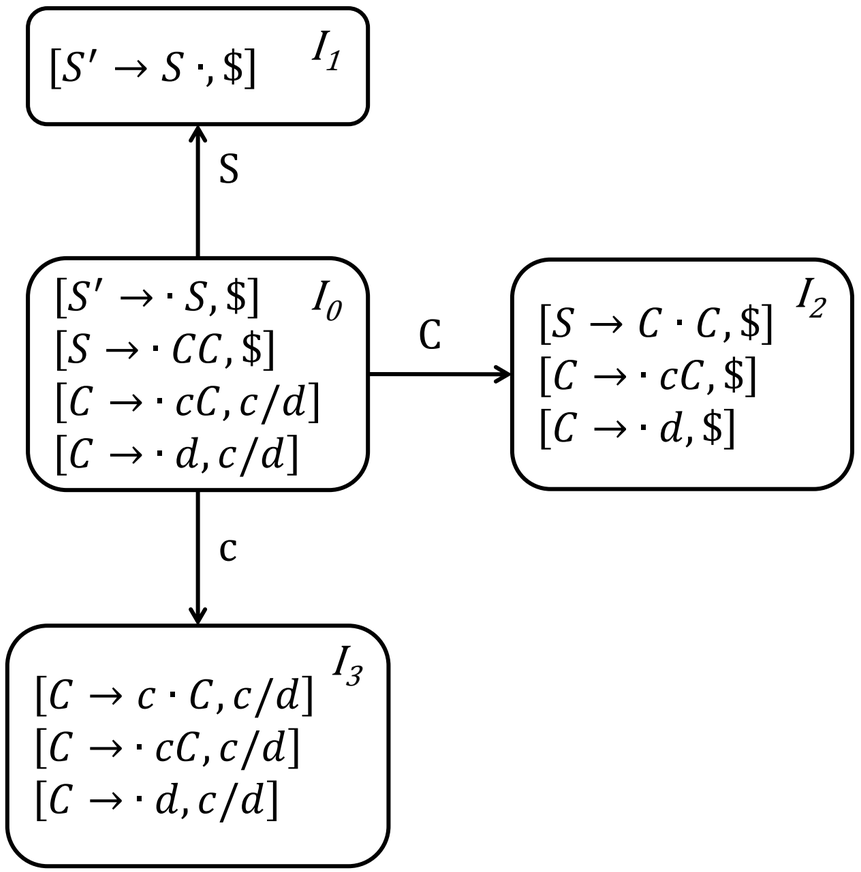
FIRST(βa) = FIRST(C$) = {c,d}

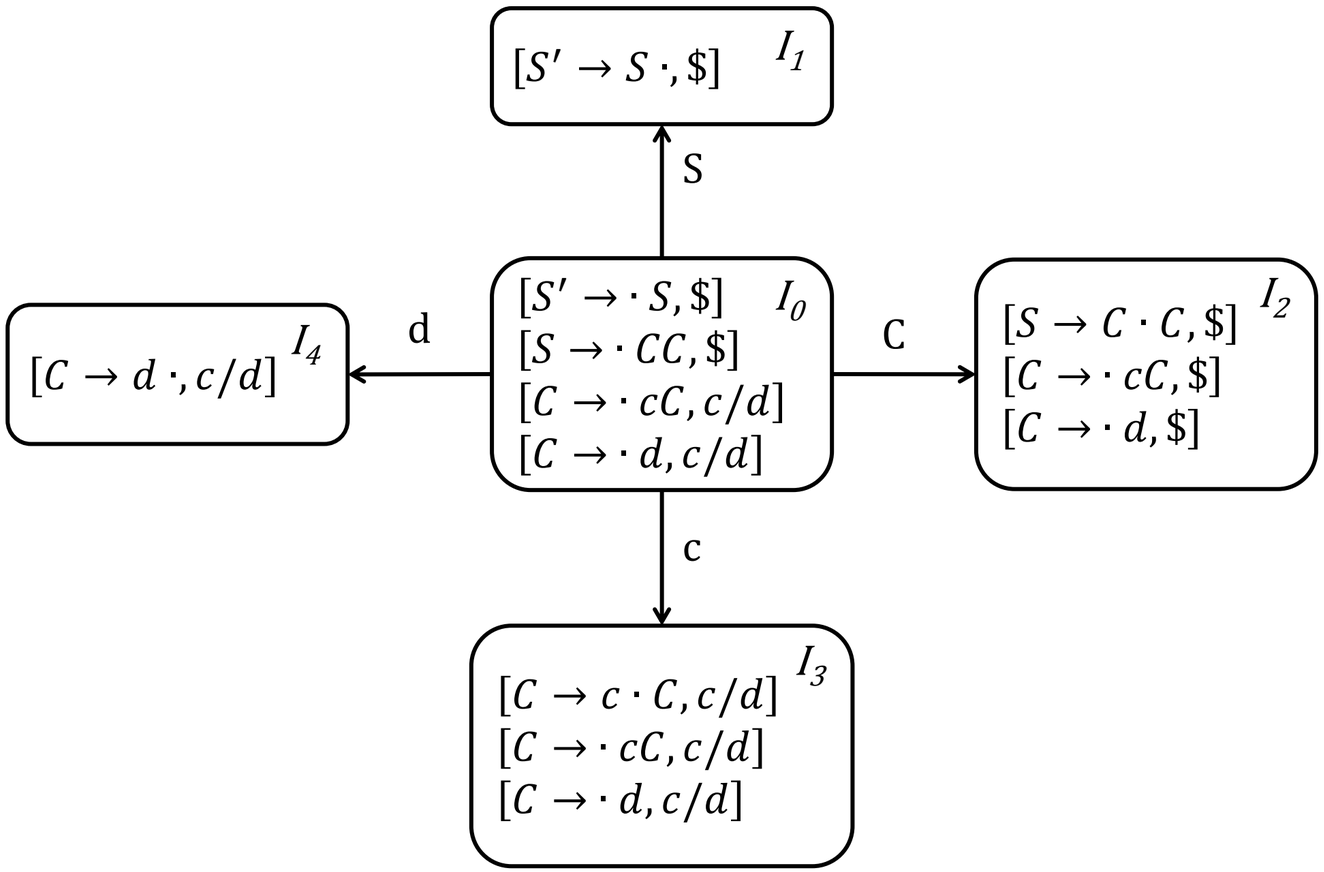
$[S' \to \cdot S, \$]$ I_0
$[S \to \cdot CC, \$]$
$[C \to \cdot cC, c/d]$
$[C \to \cdot d, c/d]$

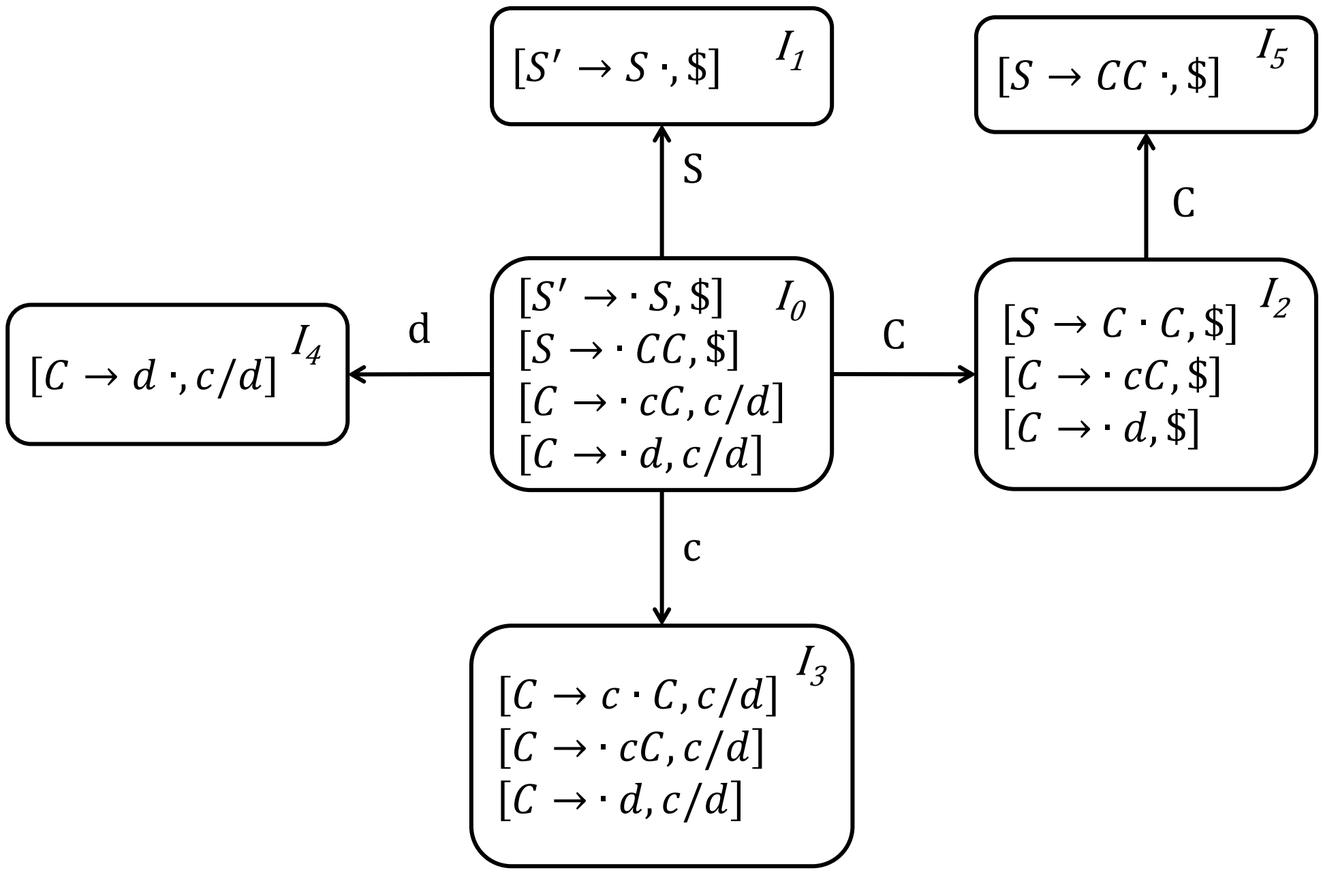
$[S' \to \cdot S, \$]$ I_0
$[S \to \cdot CC, \$]$
$[C \to \cdot cC, c/d]$
$[C \to \cdot d, c/d]$

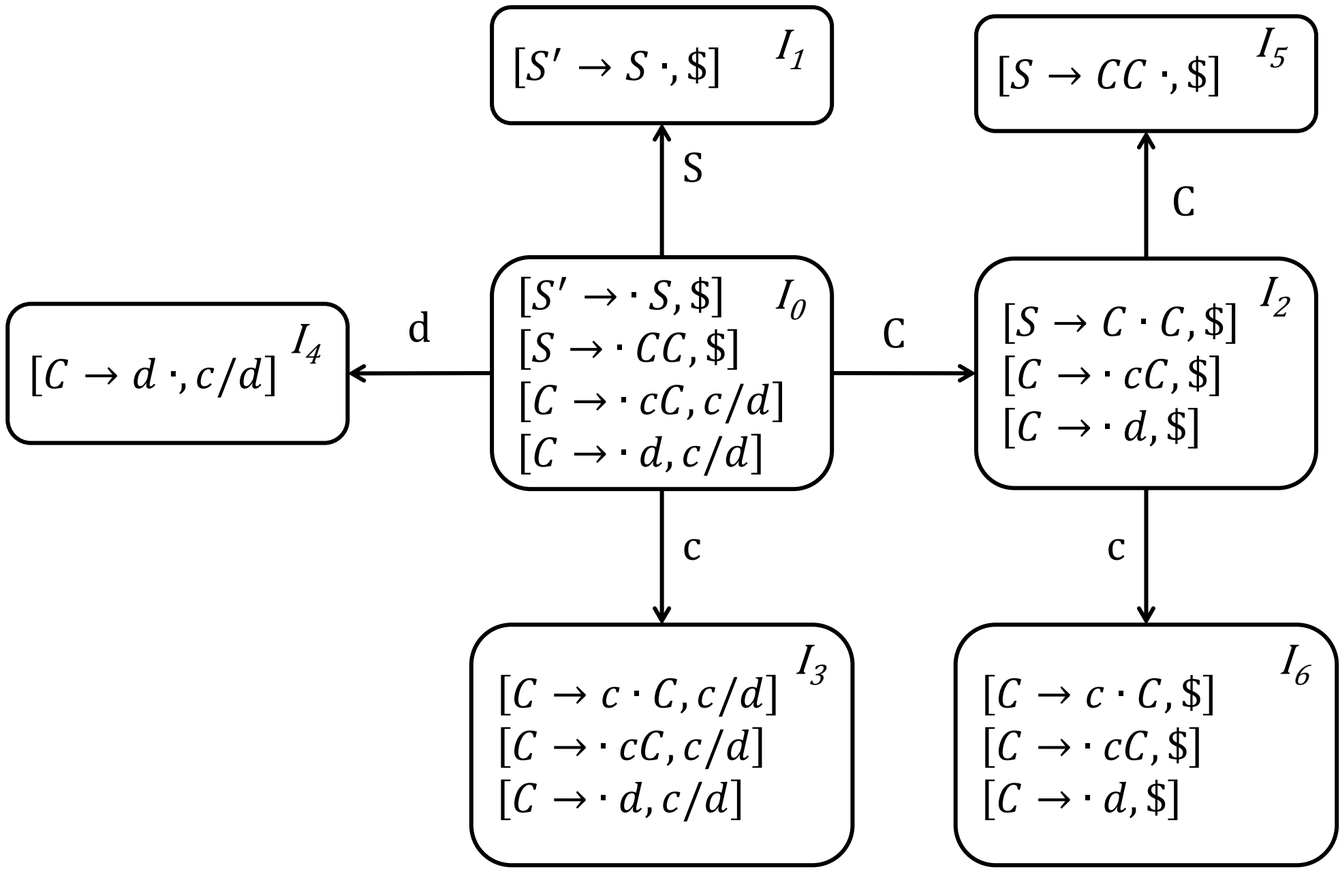

$[S' \to S \cdot, \$]$
I_1
S
$[S' \to \cdot S, \$]$
$[S \to \cdot CC, \$]$
$[C \to \cdot cC, c/d]$
$[C \to \cdot d, c/d]$
I_0

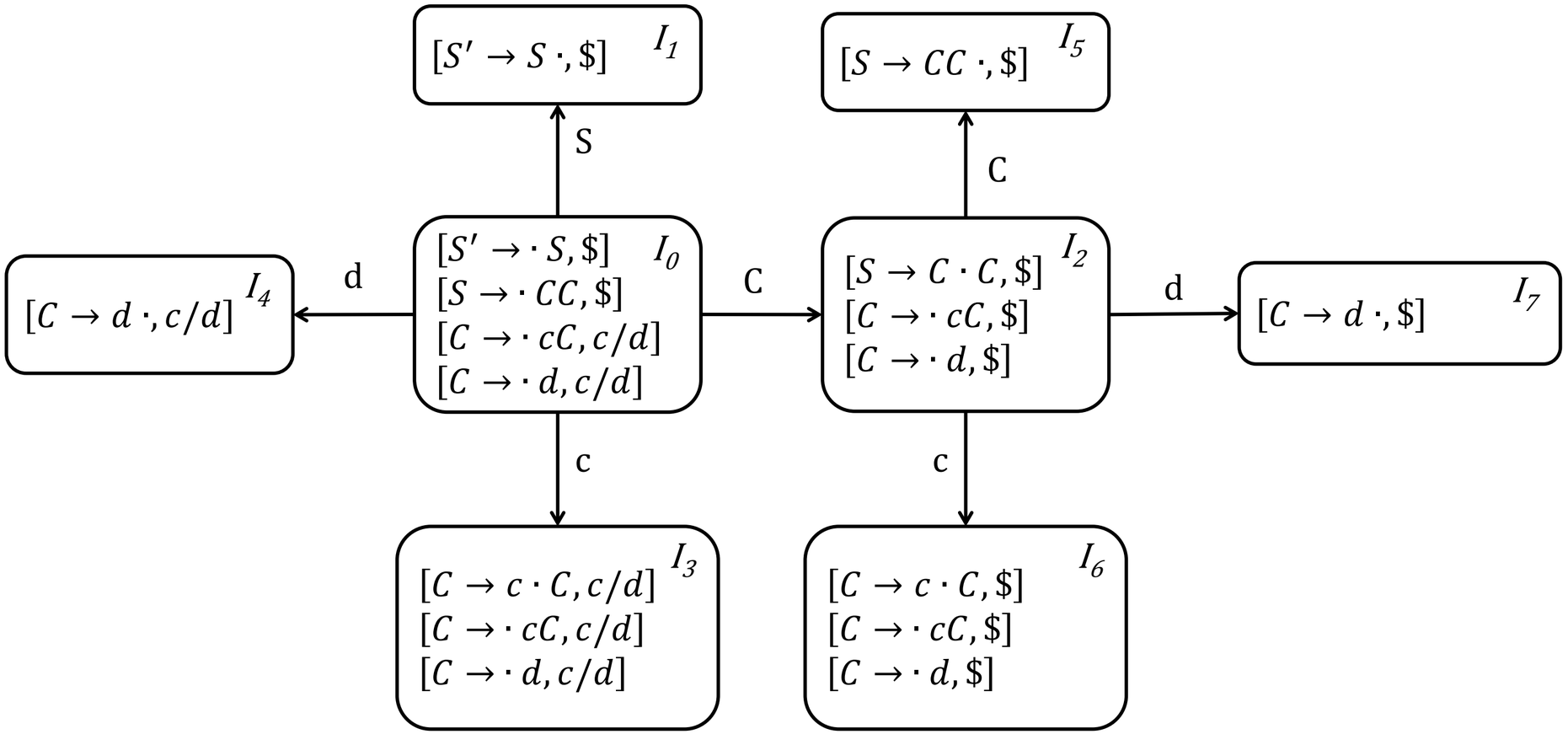

$[S' \to S \cdot, \$]$
I_1
S
$[S' \to \cdot S, \$]$
$[S \to \cdot CC, \$]$
$[C \to \cdot cC, c/d]$
$[C \to \cdot d, c/d]$
I_0
C
$[S \to C \cdot C, \$]$
$[C \to \cdot cC, \$]$
$[C \to \cdot d, \$]$
I_2

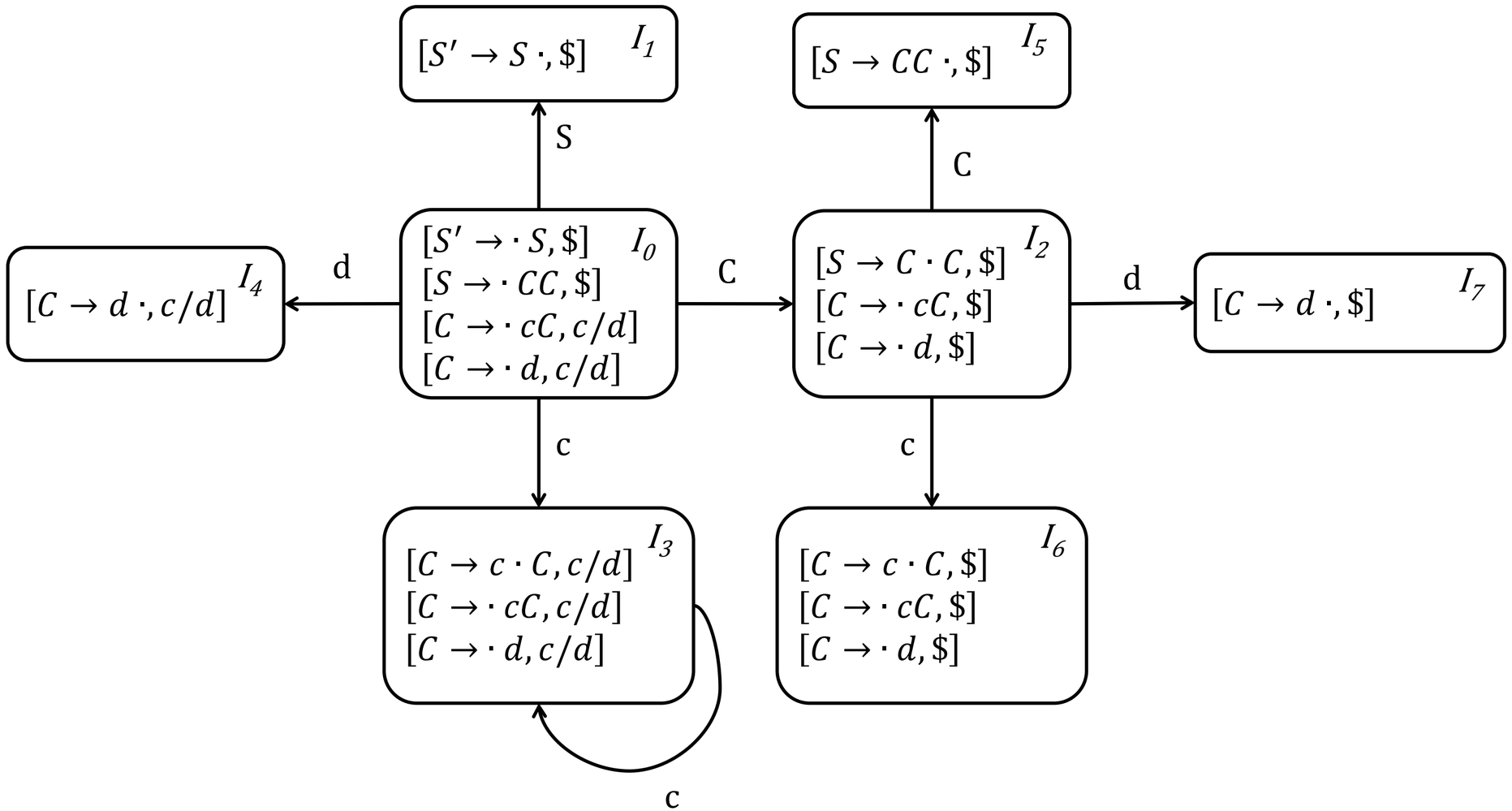

$[S' \to S \cdot, \$]$ I_1
S
$[S' \to \cdot S, \$]$ I_0
$[S \to \cdot CC, \$]$
$[C \to \cdot cC, c/d]$
$[C \to \cdot d, c/d]$
C
$[S \to C \cdot C, \$]$ I_2
$[C \to \cdot cC, \$]$
$[C \to \cdot d, \$]$
c
$[C \to c \cdot C, c/d]$ I_3
$[C \to \cdot cC, c/d]$
$[C \to \cdot d, c/d]$

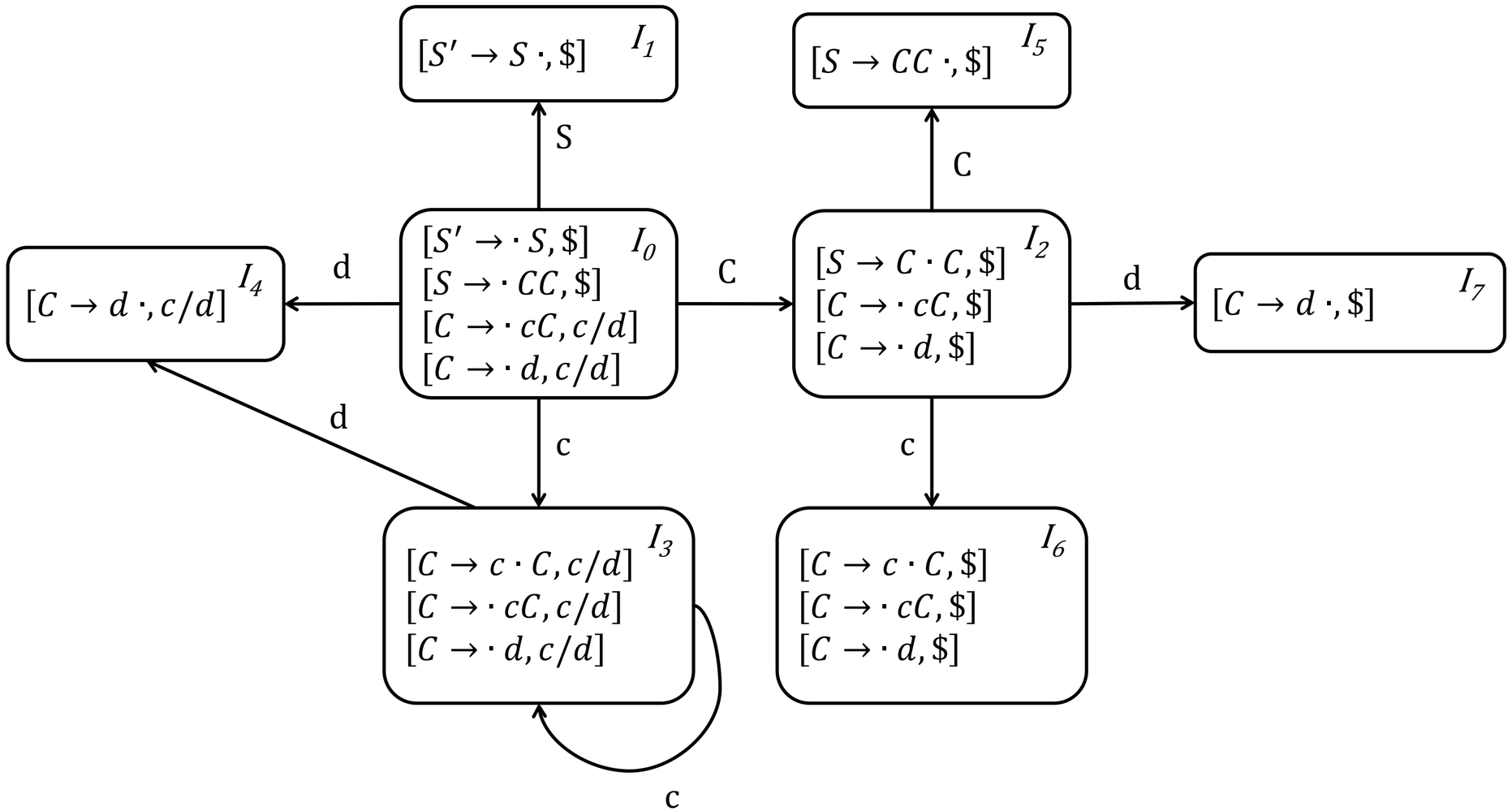

$[S' \to S \cdot, \$]$ I_1
S
$[S' \to \cdot S, \$]$
$[S \to \cdot CC, \$]$
$[C \to \cdot cC, c/d]$
$[C \to \cdot d, c/d]$
I_0
d
$[C \to d \cdot, c/d]$ I_4
C
$[S \to C \cdot C, \$]$
$[C \to \cdot cC, \$]$
$[C \to \cdot d, \$]$
I_2
c
$[C \to c \cdot C, c/d]$
$[C \to \cdot cC, c/d]$
$[C \to \cdot d, c/d]$
I_3

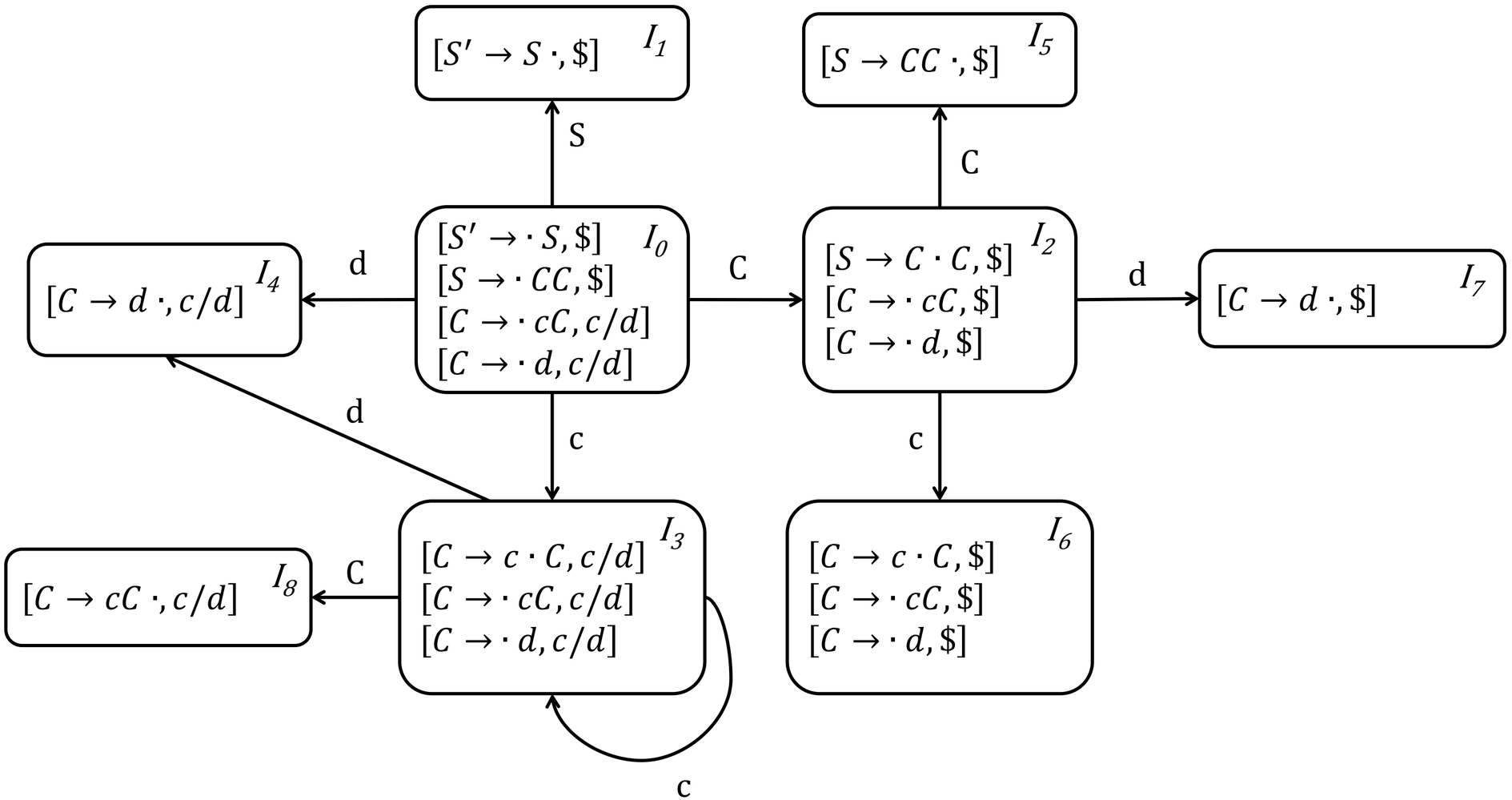

$[S' \to S \cdot, \$]$ I_1
S
$[S \to CC \cdot, \$]$ I_5
C
$[S' \to \cdot S, \$]$
$[S \to \cdot CC, \$]$
$[C \to \cdot cC, c/d]$
$[C \to \cdot d, c/d]$
I_0
d
C
$[C \to d \cdot, c/d]$ I_4
$[S \to C \cdot C, \$]$
$[C \to \cdot cC, \$]$
$[C \to \cdot d, \$]$
I_2
c
$[C \to c \cdot C, c/d]$
$[C \to \cdot cC, c/d]$
$[C \to \cdot d, c/d]$
I_3

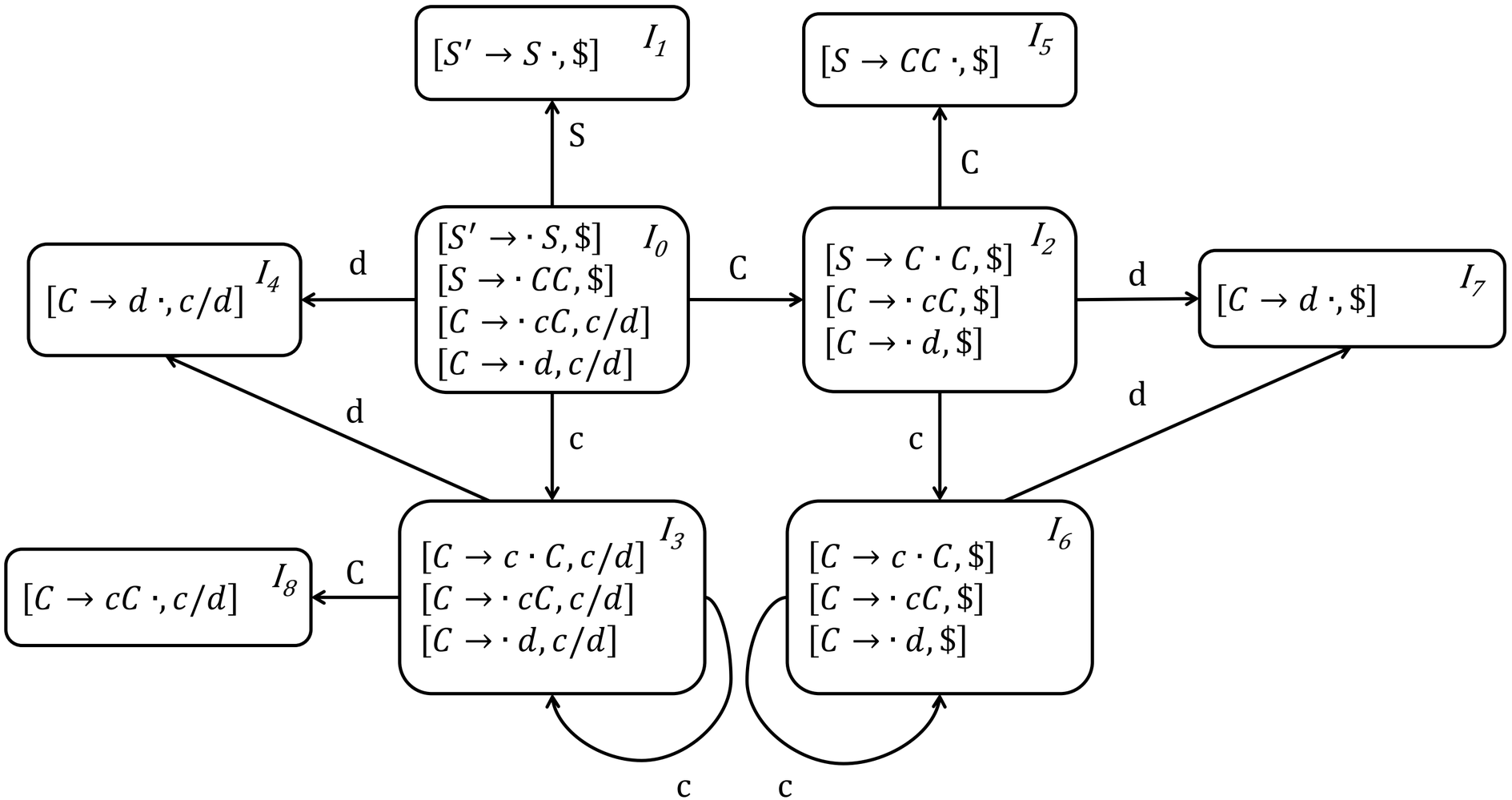

$[S' \to S \cdot, \$]$ I_1
$[S \to CC \cdot, \$]$ I_5
S
C
$[S' \to \cdot S, \$]$
$[S \to \cdot CC, \$]$
$[C \to \cdot cC, c/d]$
$[C \to \cdot d, c/d]$
I_0
d
C
$[C \to d \cdot, c/d]$ I_4
$[S \to C \cdot C, \$]$
$[C \to \cdot cC, \$]$
$[C \to \cdot d, \$]$
I_2
c
c
$[C \to c \cdot C, c/d]$
$[C \to \cdot cC, c/d]$
$[C \to \cdot d, c/d]$
I_3
$[C \to c \cdot C, \$]$
$[C \to \cdot cC, \$]$
$[C \to \cdot d, \$]$
I_6

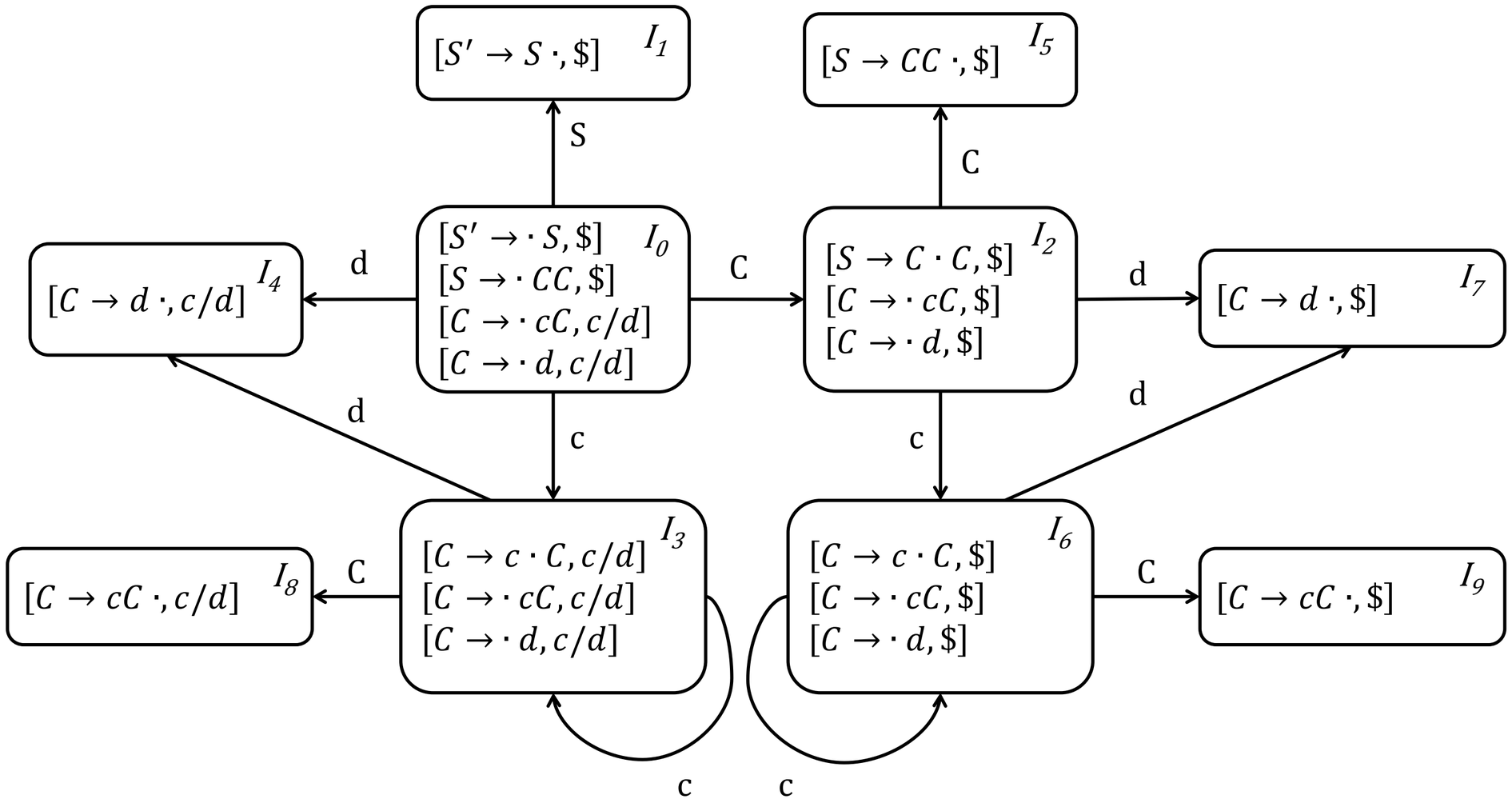

$[S' \to S \cdot, \$]$ I_1
$[S \to CC \cdot, \$]$ I_5
S
C
$[S' \to \cdot S, \$]$
$[S \to \cdot CC, \$]$
$[C \to \cdot cC, c/d]$
$[C \to \cdot d, c/d]$
I_0
$[S \to C \cdot C, \$]$
$[C \to \cdot cC, \$]$
$[C \to \cdot d, \$]$
I_2
d
C
d
$[C \to d \cdot, c/d]$ I_4
$[C \to d \cdot, \$]$ I_7
c
c
$[C \to c \cdot C, c/d]$
$[C \to \cdot cC, c/d]$
$[C \to \cdot d, c/d]$
I_3
$[C \to c \cdot C, \$]$
$[C \to \cdot cC, \$]$
$[C \to \cdot d, \$]$
I_6


$[S' \to S \cdot, \$]$ I_1
$[S \to CC \cdot, \$]$ I_5
S
C
$[S' \to \cdot S, \$]$
$[S \to \cdot CC, \$]$
$[C \to \cdot cC, c/d]$
$[C \to \cdot d, c/d]$
I_0
$[S \to C \cdot C, \$]$
$[C \to \cdot cC, \$]$
$[C \to \cdot d, \$]$
I_2
d
C
d
$[C \to d \cdot, c/d]$ I_4
$[C \to d \cdot, \$]$ I_7
c
c
$[C \to c \cdot C, c/d]$
$[C \to \cdot cC, c/d]$
$[C \to \cdot d, c/d]$
I_3
$[C \to c \cdot C, \$]$
$[C \to \cdot cC, \$]$
$[C \to \cdot d, \$]$
I_6
c


$[S' \to S \cdot, \$]$ I_1
$[S \to CC \cdot, \$]$ I_5
S
C
$[S' \to \cdot S, \$]$
$[S \to \cdot CC, \$]$
$[C \to \cdot cC, c/d]$
$[C \to \cdot d, c/d]$
I_0
$[S \to C \cdot C, \$]$
$[C \to \cdot cC, \$]$
$[C \to \cdot d, \$]$
I_2
$[C \to d \cdot, c/d]$ I_4
$[C \to d \cdot, \$]$ I_7
d
C
d
d
c
c
$[C \to c \cdot C, c/d]$
$[C \to \cdot cC, c/d]$
$[C \to \cdot d, c/d]$
I_3
$[C \to c \cdot C, \$]$
$[C \to \cdot cC, \$]$
$[C \to \cdot d, \$]$
I_6
c


$[S' \to S \cdot, \$]$ I_1
$[S \to CC \cdot, \$]$ I_5
S
C
$[S' \to \cdot S, \$]$
$[S \to \cdot CC, \$]$
$[C \to \cdot cC, c/d]$
$[C \to \cdot d, c/d]$
I_0
$[S \to C \cdot C, \$]$
$[C \to \cdot cC, \$]$
$[C \to \cdot d, \$]$
I_2
d
C
$[C \to d \cdot, c/d]$ I_4
$[C \to d \cdot, \$]$ I_7
d
c
c
$[C \to c \cdot C, c/d]$
$[C \to \cdot cC, c/d]$
$[C \to \cdot d, c/d]$
I_3
$[C \to c \cdot C, \$]$
$[C \to \cdot cC, \$]$
$[C \to \cdot d, \$]$
I_6
C
$[C \to cC \cdot, c/d]$ I_8
c


$[S' \to S \cdot, \$]$ I_1
$[S \to CC \cdot, \$]$ I_5
S
C
$[S' \to \cdot S, \$]$
$[S \to \cdot CC, \$]$
$[C \to \cdot cC, c/d]$
$[C \to \cdot d, c/d]$
I_0
$[S \to C \cdot C, \$]$
$[C \to \cdot cC, \$]$
$[C \to \cdot d, \$]$
I_2
d
C
$[C \to d \cdot, c/d]$ I_4
$[C \to d \cdot, \$]$ I_7
d
d
d
c
c
$[C \to c \cdot C, c/d]$
$[C \to \cdot cC, c/d]$
$[C \to \cdot d, c/d]$
I_3
$[C \to c \cdot C, \$]$
$[C \to \cdot cC, \$]$
$[C \to \cdot d, \$]$
I_6
C
$[C \to cC \cdot, c/d]$ I_8
c
c


$[S' \to S \cdot, \$]$ I_1
$[S \to CC \cdot, \$]$ I_5
$[S' \to \cdot S, \$]$
$[S \to \cdot CC, \$]$
$[C \to \cdot cC, c/d]$
$[C \to \cdot d, c/d]$ I_0
$[S \to C \cdot C, \$]$
$[C \to \cdot cC, \$]$
$[C \to \cdot d, \$]$ I_2
$[C \to d \cdot, c/d]$ I_4
$[C \to d \cdot, \$]$ I_7
$[C \to c \cdot C, c/d]$
$[C \to \cdot cC, c/d]$
$[C \to \cdot d, c/d]$ I_3
$[C \to c \cdot C, \$]$
$[C \to \cdot cC, \$]$
$[C \to \cdot d, \$]$ I_6
$[C \to cC \cdot, c/d]$ I_8
$[C \to cC \cdot, \$]$ I_9
S
C
C
d
d
d
d
c
c
c
c
c

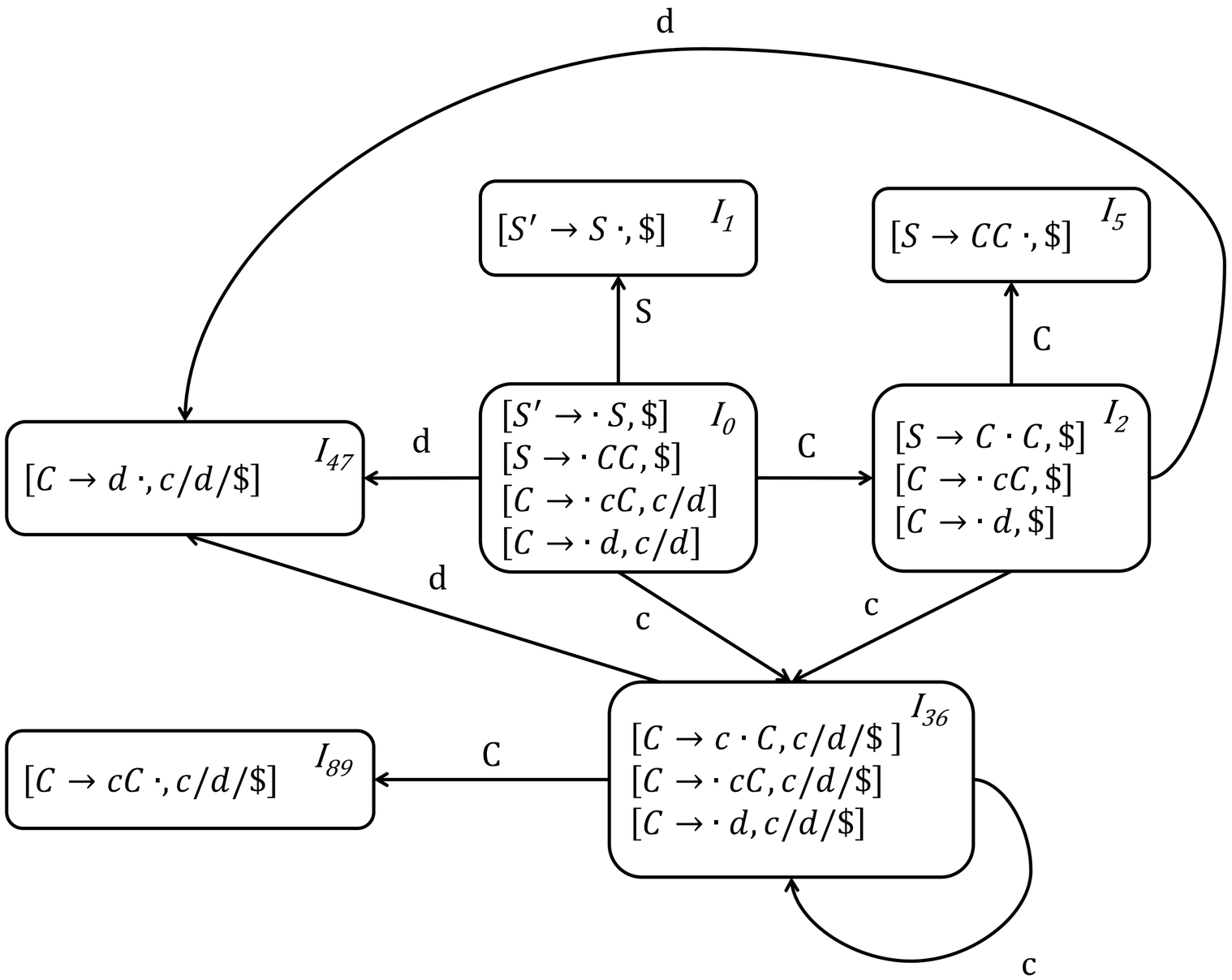

d
$[S' \to S \cdot, \$]$ I_1
$[S \to CC \cdot, \$]$ I_5
S
C
$[S' \to \cdot S, \$]$
$[S \to \cdot CC, \$]$
$[C \to \cdot cC, c/d]$
$[C \to \cdot d, c/d]$
I_0
$[S \to C \cdot C, \$]$
$[C \to \cdot cC, \$]$
$[C \to \cdot d, \$]$
I_2
$[C \to d \cdot, c/d/\$]$ I_{47}
d
C
d
c
c
$[C \to c \cdot C, c/d/\$]$
$[C \to \cdot cC, c/d/\$]$
$[C \to \cdot d, c/d/\$]$
I_{36}
$[C \to cC \cdot, c/d/\$]$ I_{89}
C
c

Tabla LALR(1)

	ACTION			GOTO	
	c	**d**	**$**	**S**	**C**
I_0	S36	S47		1	2
I_1			ACEPTO		
I_2	S36	S47			5
I_{36}	S36	S47			89
I_{47}	R3	R3	R3		
I_5			R1		
I_{89}	R2	R2	R2		