

Instituto Tecnológico de Costa Rica

Escuela de Ingeniería en Computación



IC-5701 Compiladores e Intérpretes

Grupo 20

Portafolio 5

Profesor:

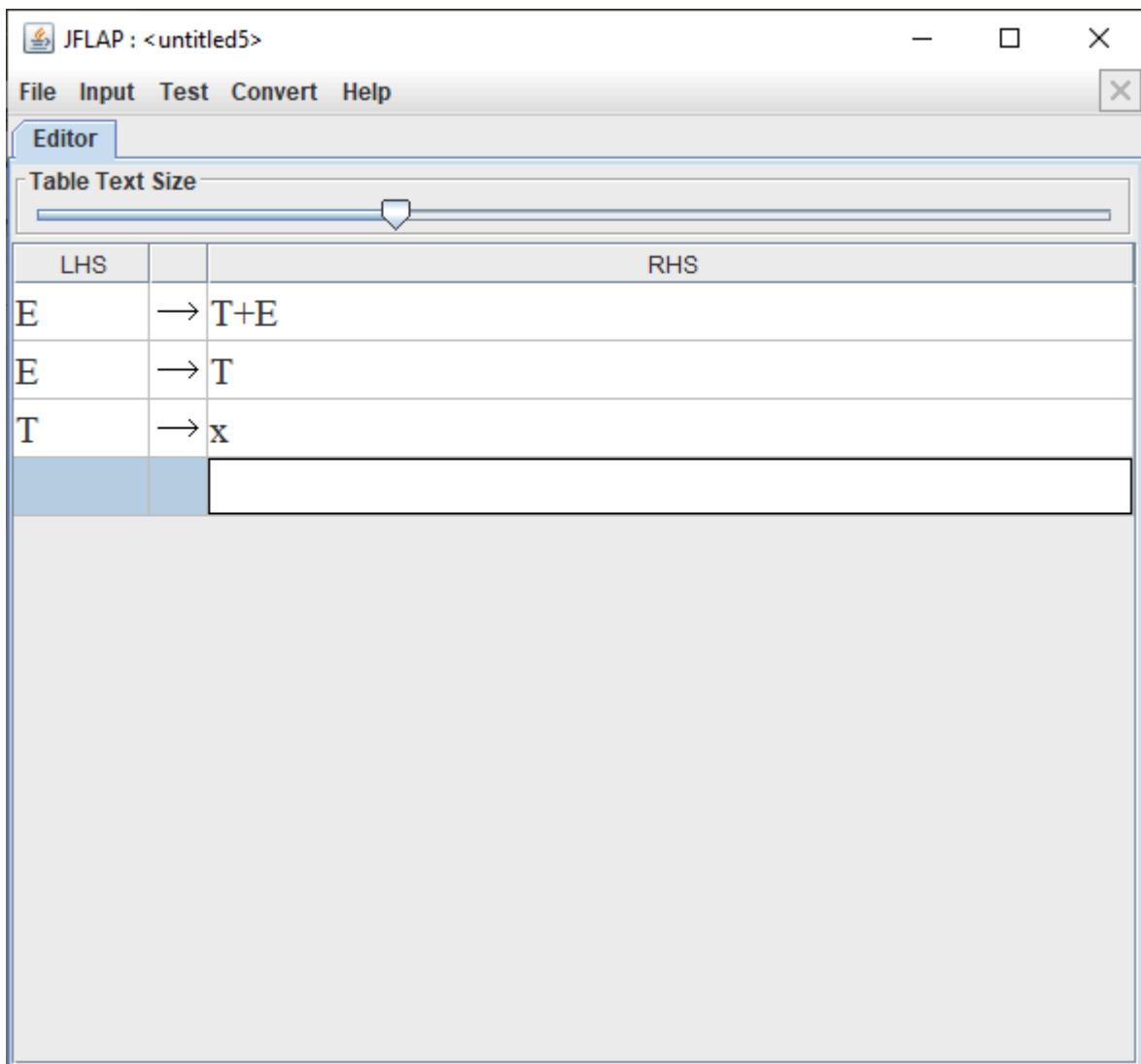
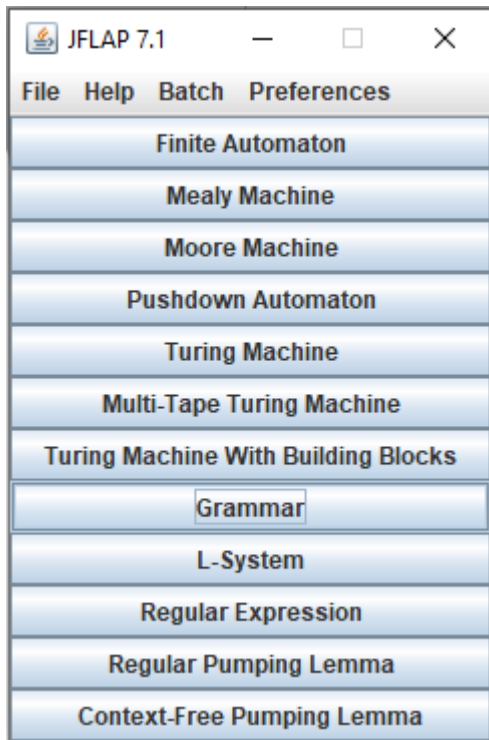
Emmanuel Ramírez Segura

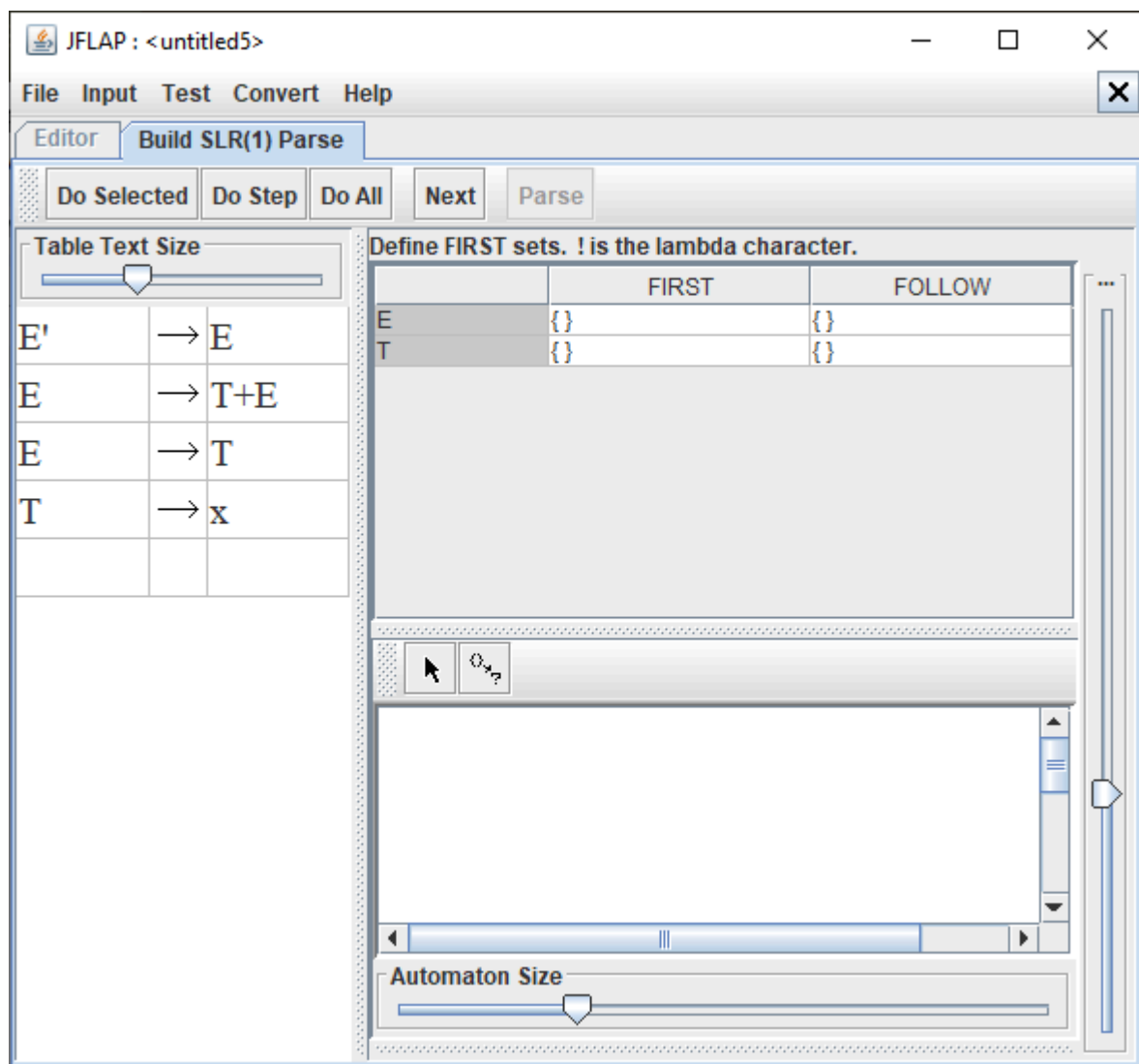
Estudiante:

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Noviembre, 2024

II Semestre





JFLAP : <untitled5>

File Input Test Convert Help

Editor Build SLR(1) Parse

Do Selected Do Step Do All Next Parse

Table Text Size

Parse table complete. Press "parse" to use it.

	FIRST	FOLLOW
E'	{ x }	{ \$ }
T	{ x }	{ \$, + }

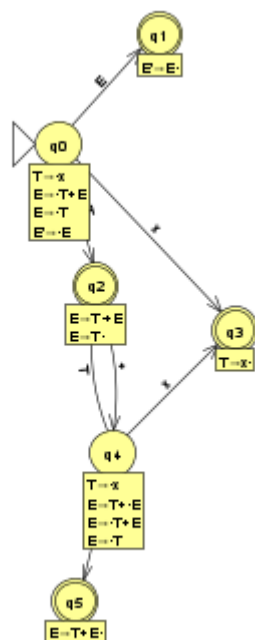
Diagram showing the LR(0) items and transitions for the grammar:

```

graph TD
    q0((q0)) -- E --> q1((q1))
    q0 -- x --> q3((q3))
    q0 -- "+" --> q2((q2))
    q2 -- E --> q4((q4))
    q2 -- x --> q3
    q3 -- "$" --> q5((q5))
    q4 -- E --> q4
    q4 -- x --> q3
    q4 -- "+" --> q2
    q5 -- "$" --> q5
  
```

	+	x	\$	E	T
0		s3		1	2
1			acc		
2	s4		r2		
3	r3		r3		
4		s3		5	2
5			r1		

Table Text Size



JFLAP : <untitled5>

File Input Test Convert Help

Editor Build SLR(1) Parse SLR(1) Parsing

Table Text Size

	+	x	\$	E	T
0		s3		1	2
1			acc		
2	s4		r2		
3	r3		r3		
4		s3		5	2
5			r1		

Start Step Noninverted Tree

Input $x+x+x$

Input Remaining

Stack

Input Field Text Size (For optimization, move one of the window size adjusto...)

Table Text Size

LHS		RHS
E'	\rightarrow	E
E	\rightarrow	T+E
E	\rightarrow	T
T	\rightarrow	x

Input a string to begin.

JFLAP : <untitled5>

File Input Test Convert Help

Editor

Build SLR(1) Parse

SLR(1) Parsing

Table Text Size

	+	x	\$	E	T
0		s3		1	2
1			acc		
2	s4		r2		
3	r3		r3		
4		s3		5	2
5			r1		

Start Step Noninverted Tree

Input

x+x+x

Input Remaining

\$

Stack

E0

Input Field Text Size (For optimization, move one of the window size adjusto...

Table Text Size

LHS		RHS
E'	→	E
E	→	T+E
E	→	T
T	→	x

String accepted

JFLAP : <untitled5>

File Input Test Convert Help

Editor

Build SLR(1) Parse

SLR(1) Parsing

Table Text Size

	+	x	\$	E	T
0		s3		1	2
1			acc		
2	s4		r2		
3	r3		r3		
4		s3		5	2
5			r1		

Start Step Inverted Tree

Input

x+x+x

Input Remaining

\$

Stack

E0

Input Field Text Size (For optimization, move one of the window size adjusto...

Table Text Size

LHS		RHS
E'	→	E
E	→	T+E
E	→	T
T	→	x

```

graph TD
    E1((E)) --- T1((T))
    E1 --- P1((+))
    E1 --- E2((E))
    T1 --- x1((x))
    E2 --- T2((T))
    E2 --- P2((+))
    E2 --- E3((E))
    T2 --- x2((x))
    E3 --- T3((T))
    E3 --- x3((x))
    T3 --- x4((x))
  
```

String accepted

JFLAP : <untitled5>

File Input Test Convert Help

Editor Build SLR(1) Parse SLR(1) Parsing

Table Text Size

	+	x	\$	E	T
0		s3		1	2
1			acc		
2	s4		r2		
3	r3		r3		
4		s3		5	2
5			r1		

Start Step Derivation Table

Input $x+x+x$

Input Remaining \$

Stack E0

Input Field Text Size (For optimization, move one of the window size adjusto...)

Table Text Size

LHS		RHS
E'	\rightarrow	E
E	\rightarrow	T+E
E	\rightarrow	T
T	\rightarrow	x

Table Text Size

	$x+x+x$
T \rightarrow x	T \rightarrow x
T \rightarrow x	T \rightarrow T+x
T \rightarrow x	T \rightarrow T+T
E \rightarrow T	T \rightarrow T+E
E \rightarrow T+E	T \rightarrow E
E \rightarrow T+E	E

String accepted