

Let's write an LL(1) parser for the following grammar for Prefix notation

$E \rightarrow n \mid A$   
 $A \rightarrow (B)$   
 $B \rightarrow +EE$   
 $B \rightarrow *EE$

(Don't type the spaces!!)

What are the sets First(A), First(B) and First(E)?

*A must start with a '(', B starts with either + or \*, and E starts with a '(' or n*

What are the sets Follows(A), Follows(B) and Follows(E)?

*A is followed by '\$' or '(' or ')' or a number n*

*B is followed by a ')'*

*And since E reduces to a single number, which is followed by \$, or what follows A, we have '\$' or '(' or ')' or a number n.*

Select Input, enter the First and Follow sets and build the parse table.

The screenshot shows the JFLAP software interface. The 'Build LL(1) Parse' window is active, displaying the grammar rules in the editor on the left and the resulting parse table on the right.

**Editor:**

E	→	n
E	→	A
A	→	(B)
B	→	+EE
B	→	*EE

**Parse Table:**

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

		FIRST	FOLLOW
A		{(}	{\$, (, n}
B		{*, +}	{)}
E		{(, n}	{\$, (, n}

  

	(	)	*	+	n	\$
A	(B)					
B			*EE	+EE		
E	A				n	