

Test Case:

If the test case $2 + 1$, the code would come out with [Int: 2 , Plus, Int: 1]

If the test case $d + 1$, the code would come out with Incorrect character d

LR(1) Parser Table

LR(1) grammar ('' is ϵ):

```
(0) S' -> A +B
(1) S -> A *A
(2) C -> B * B
(3) D -> C + A
(4) C' -> B * A
(5) B' -> D * D
```

>>

LR(1) closure table			
Goto	Kernel	State	Closure
	{[S' -> .A +B, \$]}	0	{[S' -> .A +B, \$]}
goto(0, A)	{[S' -> A.+B, \$]}	1	{[S' -> A.+B, \$]}
goto(1, +B)	{[S' -> A +B., \$]}	2	{[S' -> A +B., \$]}

LR table

State	ACTION					GOTO					
	A	+B	*A	B	+	\$	S'	S	C	D	C' B'
0	s1										
1		s2									
2						acc					

Input (tokens): c d d

Maximum number of steps: 100

PARSE

Trace

Step	Stack	Input	Action	Tree
1	0	c d d \$		

FIRST table	
Nonterminal	FIRST
S'	{A}
S	{A}
C	{B}
D	{B}
C'	{B}
B'	{B}