Pratham Merchant
Parse Table

LR(1) grammar ('' is ε):

```
(0) S'-> pratlang EXPR end
(1) EXPR -> TERM + TERM
(2) EXPR -> TERM - TERM
(3) EXPR -> TERM / TERM
(4) EXPR -> TERM
(5) TERM -> FACTOR *
(6) FACTOR
(7) TERM -> FACTOR %
(8) FACTOR
(9) TERM -> FACTOR
    FACTOR -> id
    FACTOR -> int_lit
```

>>

FIRST table	
Nonterminal	**FIRST**
S'	{pratlang}
EXPR	{id,int_lit}
TERM	{id,int_lit}
FACTOR	{id,int_lit}

Pratham Merchant
Parse Table

Input (tokens): `pratlang id * int_lit + id end`

Maximum number of steps: `1000000`

PARSE

Trace				Tree
Step	Stack	Input	Action	
1	0	pratlang id * int_lit + id end $	s1	pratlang
2	0 pratlang 1	id * int_lit + id end $	s5	
3	0 pratlang 1 id 5	* int_lit + id end $	r_8	
4	0 pratlang 1 FACTOR	* int_lit + id end $	4	
5	0 pratlang 1 FACTOR 4	* int_lit + id end $	s11	
6	0 pratlang 1 FACTOR 4 * 11	int_lit + id end $	s21	
7	0 pratlang 1 FACTOR 4 * 11 int_lit 21	+ id end $	r_9	
8	0 pratlang 1 FACTOR 4 * 11 FACTOR	+ id end $	19	
9	0 pratlang 1 FACTOR 4 * 11 FACTOR 19	+ id end $	r_5	
10	0 pratlang 1 TERM	+ id end $	3	
11	0 pratlang 1 TERM 3	+ id end $	s8	
12	0 pratlang 1 TERM 3 + 8	id end $	s15	
13	0 pratlang 1 TERM 3 + 8 id 15	end $	r_8	
14	0 pratlang 1 TERM 3 + 8 FACTOR	end $	14	
15	0 pratlang 1 TERM 3 + 8 FACTOR 14	end $	r_7	
16	0 pratlang 1 TERM 3 + 8 TERM	end $	13	
17	0 pratlang 1 TERM 3 + 8 TERM 13	end $	r_1	

Trace				Tree
Step	Stack	Input	Action	
1	0	pratlang id * int_lit + id end $	s1	pratlang
2	0 pratlang 1	id * int_lit + id end $	s5	
3	0 pratlang 1 id 5	* int_lit + id end $	r_8	
4	0 pratlang 1 FACTOR	* int_lit + id end $	4	
5	0 pratlang 1 FACTOR 4	* int_lit + id end $	s11	
6	0 pratlang 1 FACTOR 4 * 11	int_lit + id end $	s21	
7	0 pratlang 1 FACTOR 4 * 11 int_lit 21	+ id end $	r_9	
8	0 pratlang 1 FACTOR 4 * 11 FACTOR	+ id end $	19	
9	0 pratlang 1 FACTOR 4 * 11 FACTOR 19	+ id end $	r_5	
10	0 pratlang 1 TERM	+ id end $	3	
11	0 pratlang 1 TERM 3	+ id end $	s8	
12	0 pratlang 1 TERM 3 + 8	id end $	s15	
13	0 pratlang 1 TERM 3 + 8 id 15	end $	r_8	
14	0 pratlang 1 TERM 3 + 8 FACTOR	end $	14	
15	0 pratlang 1 TERM 3 + 8 FACTOR 14	end $	r_7	
16	0 pratlang 1 TERM 3 + 8 TERM	end $	13	
17	0 pratlang 1 TERM 3 + 8 TERM 13	end $	r_1	
18	0 pratlang 1 EXPR	end $	2	
19	0 pratlang 1 EXPR 2	end $	s7	
20	0 pratlang 1 EXPR 2 end 7	$	acc	

Pratham Merchant
Parse Table

Input (tokens): `pratlang id % int_lit / id end`

Maximum number of steps: `1000000`

PARSE

Trace				Tree
Step	Stack	Input	Action	
1	0	pratlang id % int_lit / id end $	s1	pratlang
2	0 pratlang 1	id % int_lit / id end $	s5	
3	0 pratlang 1 id 5	% int_lit / id end $	r_8	
4	0 pratlang 1 FACTOR	% int_lit / id end $	4	
5	0 pratlang 1 FACTOR 4	% int_lit / id end $	s12	
6	0 pratlang 1 FACTOR 4 % 12	int_lit / id end $	s21	
7	0 pratlang 1 FACTOR 4 % 12 int_lit 21	/ id end $	r_9	
8	0 pratlang 1 FACTOR 4 % 12 FACTOR	/ id end $	22	
9	0 pratlang 1 FACTOR 4 % 12 FACTOR 22	/ id end $	r_6	
10	0 pratlang 1 TERM	/ id end $	3	
11	0 pratlang 1 TERM 3	/ id end $	s10	
12	0 pratlang 1 TERM 3 / 10	id end $	s15	
13	0 pratlang 1 TERM 3 / 10 id 15	end $	r_8	
14	0 pratlang 1 TERM 3 / 10 FACTOR	end $	14	
15	0 pratlang 1 TERM 3 / 10 FACTOR 14	end $	r_7	
16	0 pratlang 1 TERM 3 / 10 TERM	end $	18	
17	0 pratlang 1 TERM 3 / 10 TERM 18	end $	r_3	
18	0 pratlang 1 EXPR	end $	2	
19	0 pratlang 1 EXPR 2	end $	s7	
20	0 pratlang 1 EXPR 2 end 7	$	acc	

Pratham Merchant
Parse Table

Input (tokens): `pratlang id % int_lit / id`

Maximum number of steps: `1000000`

PARSE

Trace				Tree
Step	Stack	Input	Action	
1	0	pratlang id % int_lit / id $	s1	
2	0 pratlang 1	id % int_lit / id $	s5	
3	0 pratlang 1 id 5	% int_lit / id $	r_8	
4	0 pratlang 1 FACTOR	% int_lit / id $	4	
5	0 pratlang 1 FACTOR 4	% int_lit / id $	s12	
6	0 pratlang 1 FACTOR 4 % 12	int_lit / id $	s21	
7	0 pratlang 1 FACTOR 4 % 12 int_lit 21	/ id $	r_9	
8	0 pratlang 1 FACTOR 4 % 12 FACTOR	/ id $	22	
9	0 pratlang 1 FACTOR 4 % 12 FACTOR 22	/ id $	r_6	
10	0 pratlang 1 TERM	/ id $	3	
11	0 pratlang 1 TERM 3	/ id $	s10	
12	0 pratlang 1 TERM 3 / 10	id $	s15	
13	0 pratlang 1 TERM 3 / 10 id 15	$		

Input (tokens): `pratlang id + id / id end`

Maximum number of steps: `1000000`

PARSE

Trace				Tree
Step	Stack	Input	Action	
1	0	pratlang id + id / id end $	s1	
2	0 pratlang 1	id + id / id end $	s5	
3	0 pratlang 1 id 5	+ id / id end $	r_8	
4	0 pratlang 1 FACTOR	+ id / id end $	4	
5	0 pratlang 1 FACTOR 4	+ id / id end $	r_7	
6	0 pratlang 1 TERM	+ id / id end $	3	
7	0 pratlang 1 TERM 3	+ id / id end $	s8	
8	0 pratlang 1 TERM 3 + 8	id / id end $	s15	
9	0 pratlang 1 TERM 3 + 8 id 15	/ id end $		