

First Follow

Calculator for finding first, follow and predict sets

[GitHub](#)

Grammar

```
factor_tail -> ε
factor -> ( expr )
factor -> id
factor -> literal
add_op -> +
add_op -> -
mult_op -> *
mult_op -> /
```

Run

Predict sets

#	Sets
1	id, read, write, \$\$
2	id, read, write
3	\$\$
4	id
5	read
6	write
7	(, id, literal

#	Sets
8	+, -
9	id, read, write, \$\$,)
10	(, id, literal
11	*, /
12	+, -, id, read, write, \$\$,)
13	(
14	id
15	literal
16	+
17	-
18	*
19	/

First sets

#	Sets
start	\$\$, id, read, write
stmt_list	ϵ , id, read, write
stmt	id, read, write
expr	(, id, literal
term_tail	ϵ , +, -
term	(, id, literal

#	Sets
factor_tail	$\epsilon, *, /$
factor	(, id, literal
add_op	+, -
mult_op	*, /

Follow sets

#	Sets
start	-
stmt_list	\$\$
stmt	id, read, write, \$\$
expr	id, read, write, \$\$,)
term_tail	id, read, write, \$\$,)
term	+, -, id, read, write, \$\$,)
factor_tail	+, -, id, read, write, \$\$,)
factor	*, /, +, -, id, read, write, \$\$,)
add_op	(, id, literal
mult_op	(, id, literal

How to enter grammar?

- One line — one rule
- Rule consists of two parts: left and right

- Left and right parts are separated by " \rightarrow "
- Left part can contain only one nonterminal
- Right part can contain terminals and nonterminals or empty chain
- Terminals and nonterminals in rule's right part must be separated by space
- Empty chain must contain only one character — ϵ