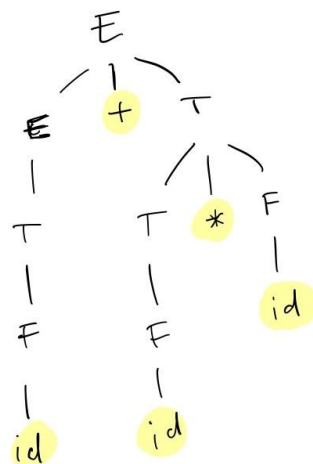


1. $(id+id)*id$

Stack	1/p	Action
\$0	$(id+id)*id$	S4
\$0(4	$id+id)*id$	S5
\$0(4id5	$+id)*id$	R6 $(F \rightarrow id) \ 1 \times 2 = 2 \text{ pop } 2$
\$0(4F3	$+id)*id$	R4 $(T \rightarrow F) \ 1 \times 2 = 2 \text{ pop } 2$
\$0(4T2	$+id)*id$	R2 $(E \rightarrow T) \ 1 \times 2 = 2 \text{ pop } 2$
\$0(4E8	$+id)*id$	S6
\$0(4E8+6	$id)*id$	S5
\$0(4E8+6id5	$)*id$	R6 $(F \rightarrow id) \ 1 \times 2 = 2 \text{ pop } 2$
\$0(4E+6F3	$)*id$	R4 $(T \rightarrow F) \ 1 \times 2 = 2 \text{ pop } 2$
\$0(4E+6T9	$)*id$	R1 $(E \rightarrow E+T) \ 2 \times 2 = 4 \text{ pop } 4$
\$0(4EE8	$)*id$	S11
\$0(4EE8)11	$*id$	R5 $(F \rightarrow (E)) \ 3 \times 2 = 6 \text{ pop } 6$
\$F3	$*id$	R4 $(T \rightarrow F) \ 1 \times 2 = 2 \text{ pop } 2$
\$T2	$*id$	S7
\$T2*7	id	S5
\$T2*7id5	\$	R6 $(F \rightarrow id) \ 1 \times 2 = 2 \text{ pop } 2$
\$T2*7F10	\$	R3 $(T \rightarrow T*F) \ 3 \times 2 = 6 \text{ pop } 6$
\$T2	\$	Accepted ✓

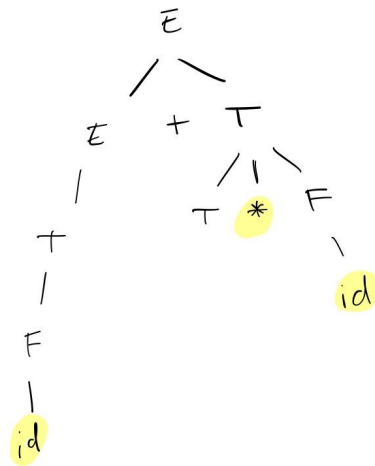
Parse tree



2. $id * id \$$

Stack	i/p	Action
\$0	$id * id \$$	S5
$\$0 id \$$	$* id \$$	R6 ($F \rightarrow id$) $1 \times 2 = 2$ pop 2
$\$0 F \$$ ~	$* id \$$	R4 ($T \rightarrow F$) $1 \times 2 = 2$ pop 2
$\$0 T \$$ ~	$* id \$$	S7
$\$0 T * \$$	$id \$$	S5
$\$0 T * id \$$	\$	R6 ($F \rightarrow id$) $1 \times 2 = 2$ pop 2
$\$0 T * F \$$ ~	\$	R3 ($T \rightarrow T * F$) $3 \times 2 = 6$ pop 6
$\$0 T \$$ ~	\$	R2 ($E \rightarrow T$) $1 \times 2 = 2$ pop 2
$\$0 E \$$ ~	\$	Accepted ✓

parse tree



3. (id*)\$

Stack	i/p	Action
\$0	(id*)\$	S4
\$0(4	id*)\$	S5
\$0(4id5	*)\$	R6 (F → id) 1x2=2 pop 2
\$0(4F3	*)\$	R4 (T → F) 1x2=2 pop 2
\$0(4T2	*)\$	S7
\$0(4T2*7)\$	Error (Empty)