CFG

E→E + T R1  
E → T R2  
T→ T \* F R3  
T→ F R4

F→ (E) R5  
F→ id R6

A table with numbers and letters

Description automatically generated

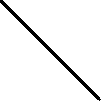
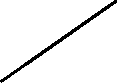
(id+id)\*id$

|  |  |  |
| --- | --- | --- |
| Stack | I/O | action |
| $0 | (id+id)\*id$ | Shift 4 |
| $0(4 | id+id)\*id$ | Shift 5 |
| $0(4id5 | +id)\*id$ | Reduce 6 |
| $0(4F3 | +id)\*id$ | Reduce 4 |
| $0(4T2 | +id)\*id$ | Shift 6 |
| $0(4T2+6 | id)\*id$ | Shift 5 |
| $0(4T2+6id5 | )\*id$ | Reduce 6 |
| $0(4T2+6F3 | )\*id$ | Reduce 4 |
| $0(4T2+6T2 | )\*id$ | Shift 11 |
| $0(4T2+6T2)11 | \*id$ | Reduce 2 |
| $0(4E2+6E2)11 | \*id$ | Reduce 5 |
| $0F+6F2 | \*id$ | Shift 7 |
| $0F+6F2\*7 | id$ | Shift 5 |
| $0F+6F2\*7id5 | $ | Reduce 6 |
| $0F+6F2\*7F3 | $ | Reduce 4 |
| $0T2+6T2\*7F3 | $ | Reduce 3 |
| $0T+ | $ | accept |
|  |  |  |

Parse tree for (id+id)\*id$

E

E



E

\*

E

E

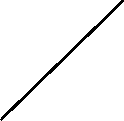
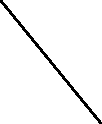
E

E

E

E

E



(

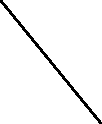
E

id

)

E

+



id

id

CFG

E→E + T R1  
E → T R2  
T→ T \* F R3  
T→ F R4

F→ (E) R5  
F→ id R6

A table with numbers and letters

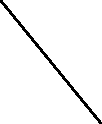
Description automatically generated

id\*id$

|  |  |  |
| --- | --- | --- |
| Stack | Input/output | action |
| $0 | id\*id$ | Shift 5 |
| $0id5 | \*id$ | Reduce 6 |
| $0F3 | \*id$ | Reduce 4 |
| $0T2 | \*id$ | Shift 7 |
| $0T2\*7 | id$ | Shift 5 |
| $0T2\*7id5 | $ | Reduce 6 |
| $0T2\*7F3 | $ | Reduce 3 |
| $0T | $ | accept |
|  |  |  |
|  |  |  |
|  |  |  |

id

id

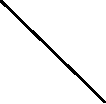
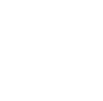


E

\*



E



E

(id\*)

A table with numbers and letters

Description automatically generated

|  |  |  |
| --- | --- | --- |
| stack | Input/output | action |
| $0 | (id\*)$ | Shift 4 |
| $0(4 | id\*)$ | Shift 5 |
| $0(4id5 | \*)$ | Reduce 6 |
| $0(4F3 | \*)$ | Shift 7 |
| $0(4F3\*7 | )$ | Shift 11 |
| $0(4F3\*7)11 | $ | No reduction |
|  |  |  |

A parse tree cant be drawn for this since this string is not accepted