

Exercise 1

1.

 $L.\text{val} = 77$

$E.\text{val} = 77$ n

 $T.\text{val} = 77$

$T.\text{val} = 7$ $*$ $F.\text{val} = 11$

 $F.\text{val} = 7$

($E.\text{val} = 11$)

($E.\text{val} = 7$)

 $E.\text{val} = 5$ $T.\text{val} = 6$

$E.\text{val} = 3$ + $T.\text{val} = 4$ $T.\text{val} = 5$ $F.\text{val} = 6$

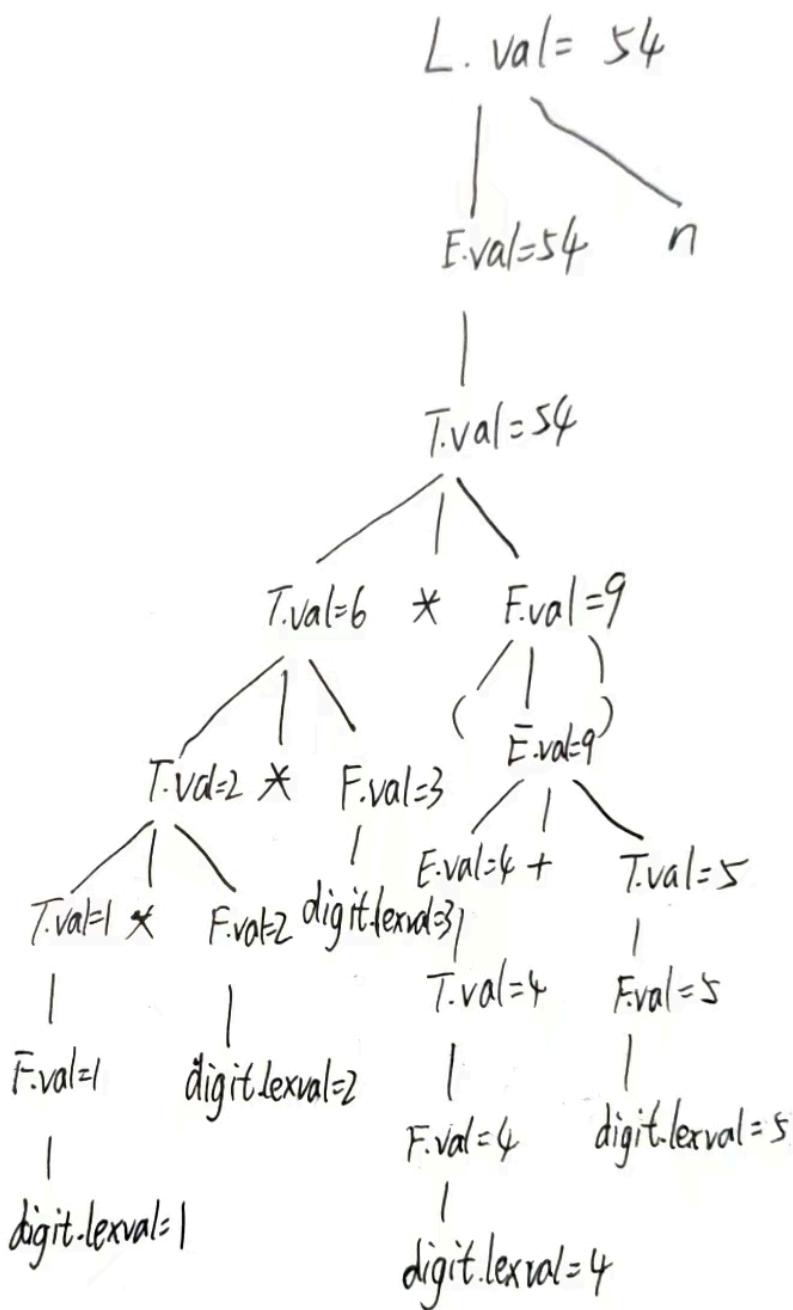
~~or~~ $T.\text{val} = 3$

 $F.\text{val} = 4$ $F.\text{val} = 5$ $\text{digit.lexval} = 6$

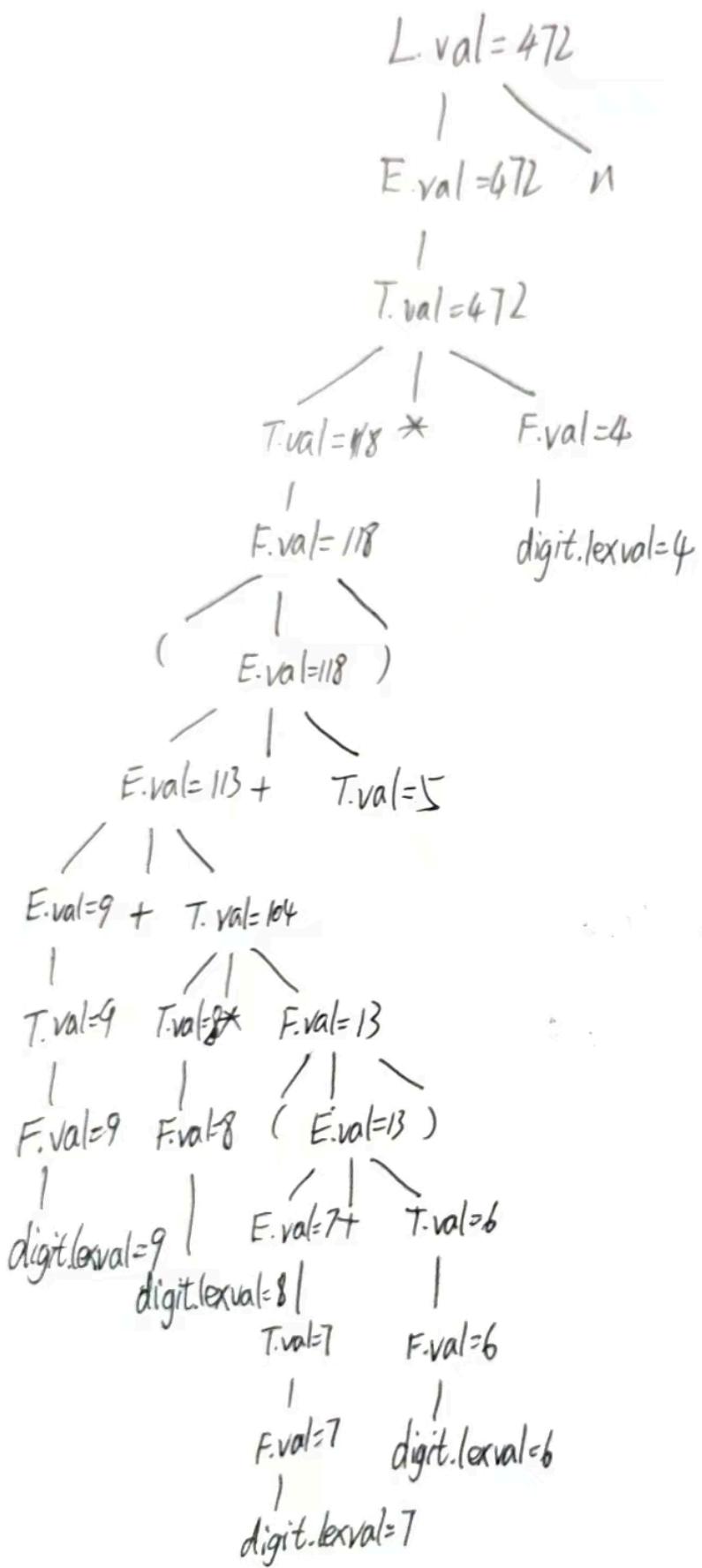
$F.\text{val} = 3$

 $\text{digit.lexval} = 4$ $\text{digit.lexval} = 3$

2.



3.



Exercise 2

- ① 1 3 5 2 4 6 7 8 9
- ② 1 3 2 4 5 6 7 8 9
- ③ 1 2 4 3 5 6 7 8 9
- ④ 2 4 1 3 5 6 7 8 9
- ⑤ 1 3 2 5 4 6 7 8 9
- ⑥ 1 2 3 5 4 : : : :
- ⑦ 2 1 3 5 4 : : : :
- ⑧ 1 0 2 3 4 5 : : : :
- ⑨ 2 1 4 3 5 6 7 8 9
- ⑩ 2 1 3 0 4 5 6 7 8 9

Exercise 3

$E \rightarrow E_1 + T$

$E.type = int$ if $E_1.type = T.type == int$
else $float$

$E \rightarrow T$

$E.type = T.type$

$T \rightarrow num \cdot num$

$T.type = float$

$T \rightarrow num$

$T.type = int$