

SDD Syntax Tree

$E \rightarrow E + T \{E.nptr = \text{makenode}(E.nptr, +, T.nptr)\}$

$E \rightarrow T \{E.nptr = T.nptr\}$

$T \rightarrow T * F \{T.nptr = \text{makenode}(T.nptr, *, F.nptr)\}$

$T \rightarrow F \{T.nptr = F.nptr\}$

$F \rightarrow \text{id} \{F.nptr = \text{makenode}(\text{Null}, \text{id}, \text{Null})\}$

Input: $2 + 3 * 4$

Syntax Tree

Only leaf
node



Parse Tree



$E \rightarrow E + T \{E.nptr = \text{makenode}(E.nptr, +, T.nptr)\}$
 $E \rightarrow T \{E.nptr = T.nptr\}$
 $T \rightarrow T * F \{T.nptr = \text{makenode}(T.nptr, *, F.nptr)\}$
 $T \rightarrow F \{T.nptr = F.nptr\}$
 $F \rightarrow \text{id} \{F.nptr = \text{makenode}(\text{Null}, \text{id}, \text{Null})\}$ Input: 2+3*4

Syntax Tree



