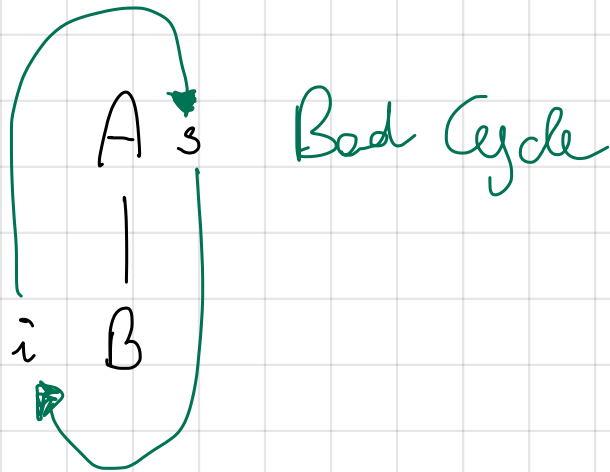


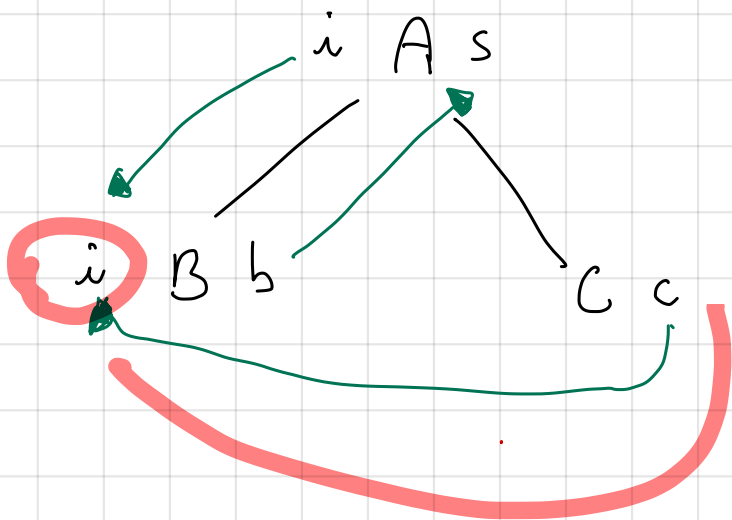
Example of SDD that cannot be implemented

$$\begin{array}{l} A \rightarrow B \\ ; \\ \end{array} \left\{ \begin{array}{l} A.s = B.i ; \\ B.i = A.s + 2 ; \end{array} \right\}$$



$$\begin{array}{l} A \rightarrow BC \\ \end{array} \left\{ \begin{array}{l} A.s = B.b ; \\ B.i = C.c + A.i \end{array} \right\}$$

not-L-attributed



No cycle

The value of $B.i$ depends on a value of another node

cannot be implemented using a DF-traversal

$$E \rightarrow E_2 + T \quad \{ \text{print}(' + ') \}$$

$$E \rightarrow T$$

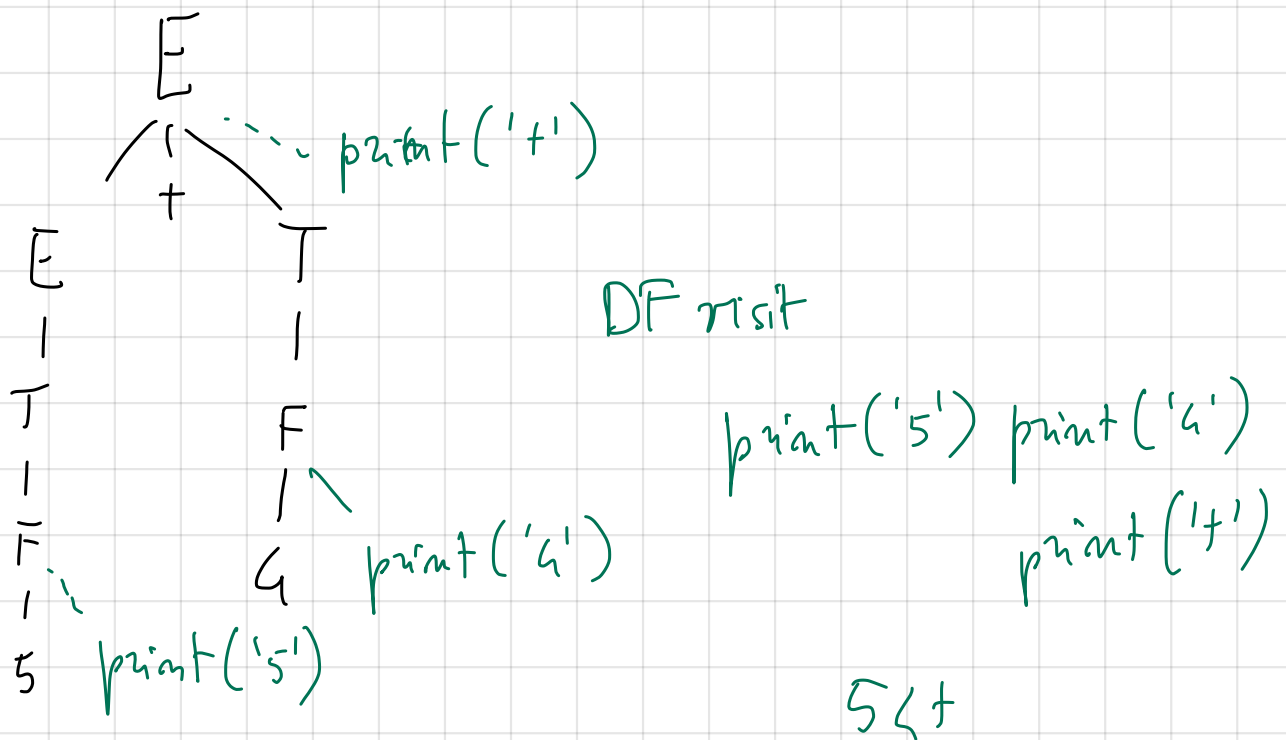
$$T \rightarrow T_2 * F \quad \{ \text{print}(' * ') \}$$

$$F \rightarrow 0 \quad \{ \text{print}(' 0 ') \}$$

$$\vdots$$

$$F \rightarrow 9 \quad \{ \text{print}(' 9 ') \}$$

5 + 4



$$E \rightarrow T E'$$

$$E' \rightarrow + T E' \quad \{ \text{print}('+') \}$$

$$E' \rightarrow \epsilon$$

$$T \rightarrow F T'$$

$$T' \rightarrow * F T' \quad \{ \text{print}('*') \}$$

$$T' \rightarrow \epsilon$$

$$F \rightarrow 0 \quad \{ \text{print}('0') \}$$

$$F \rightarrow 1$$

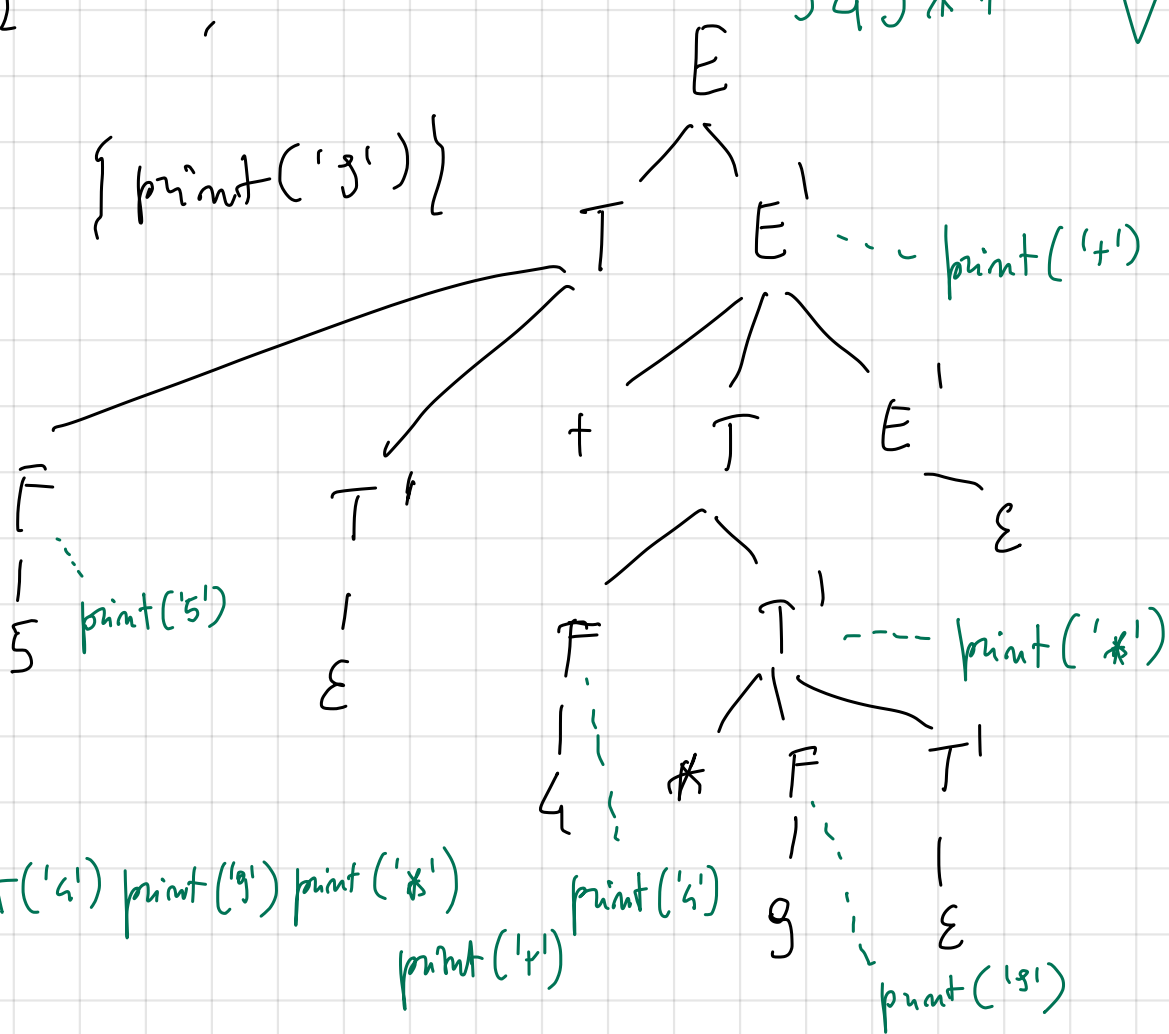
$$F \rightarrow 2$$

$$F \rightarrow 9$$

$$\{ \text{print}('3') \}$$

5 + 4 * 9

5 4 9 * +



DP visit

print('5') print('4') print('9') print('*')

print('+')

print('9')