EDAN65: Compilers Computer Science Lund University

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E05: Nullable, FIRST, FOLLOW

E05-1: Consider the following grammar (p1 etc. are production names):

$$\begin{array}{lll} \texttt{p1: } & \texttt{S} \rightarrow \texttt{T} & \$ \\ \texttt{p2: } & \texttt{T} \rightarrow \texttt{ID} \\ \texttt{p3: } & \texttt{T} \rightarrow \texttt{"(" L ")"} \\ \texttt{p4: } & \texttt{L} \rightarrow \texttt{T} & \texttt{R} \\ \texttt{p5: } & \texttt{R} \rightarrow \texttt{"," L} \\ \texttt{p6: } & \texttt{R} \rightarrow \epsilon \end{array}$$

- (a) Compute Nullable, FIRST sets, and FOLLOW sets for the nonterminals in the grammar.
- (b) Use this information to construct an LL(1) table for the grammar.
- (c) Is the grammar LL(1)?