

4/16 (9-) SLL(1) grammar

Predictive Parser

$$S \xRightarrow{lm} \alpha A \gamma \xRightarrow{lm} \alpha \beta \gamma \xRightarrow{lm} \alpha \gamma \delta \xRightarrow{lm} \alpha \gamma z$$

$$\$ S \alpha \gamma z \$ \xRightarrow{*} \$ \gamma^R A | \gamma z \$ \xRightarrow{*} \$ \gamma^R \beta | \gamma z \$ \xRightarrow{*} \$ \gamma^R | z \$ \xRightarrow{*} \$ | \$$$



Non-deterministic

produce $A \rightarrow \beta \in P$

deterministic
deterministic

(guess) \subseteq
shift
(verify)
LL(k)

$\text{First}_k(\beta) \cap \text{Follow}_k(A) = \emptyset$ or $A \rightarrow \beta \in P$
 $\text{First}_k(\beta') \cap \text{Follow}_k(A) = \emptyset$ or $A \rightarrow \beta' \in P$
 \parallel
 \emptyset SLL(k)

strong LL(k) grammar
SLL(k)

