

## Kellerautomat

Beispiel:  $L = \{a^n b^n \mid n \in \mathbb{N}\}$

### Grammatik:

$$G = (\{S\}, \{a, b\}, P, S)$$

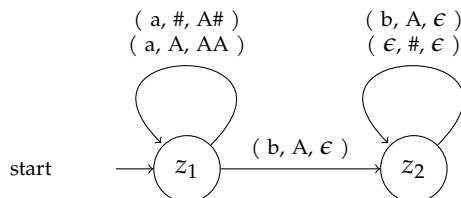
$$P = \{$$

$$S \rightarrow aSb \mid ab$$

}

### Kellerautomat:

$$K = (\{z_1, z_2\}, \{a, b\}, \{A, \#\}, \delta, z_1, \#)$$



| Aktueller Zustand | Eingabe | Keller | Folgezustand   | Keller |
|-------------------|---------|--------|----------------|--------|
| z <sub>1</sub>    | a       | #      | z <sub>1</sub> | A#     |
| z <sub>1</sub>    | a       | A      | z <sub>1</sub> | AA     |
| z <sub>1</sub>    | b       | A      | z <sub>2</sub> | ε      |
| z <sub>2</sub>    | b       | A      | z <sub>2</sub> | ε      |
| z <sub>2</sub>    | ε       | #      | z <sub>2</sub> | #      |