

$e_1, e_2, e_3$  are expressions  
 $v$  is a variable

$$\left\{ \begin{array}{l} \text{if } e_1: \\ \quad v = e_2 \\ \text{else:} \\ \quad v = e_3 \end{array} \right\} \longrightarrow \{v = e_2 \text{ if } e_1 \text{ else } e_3\}$$

$$\left\{ \begin{array}{l} \text{def } f(\text{args}): \\ \quad \text{return expr} \\ f \end{array} \right\} \longrightarrow \{\text{lambda args: expr}\}$$

$$\{x^2 \mid x \in \mathbb{N}, x \geq 0\}$$

$$\left\{ \begin{array}{l} xs = [] \\ \text{for } x \text{ in } e_1: \\ \quad xs.append(e_2) \end{array} \right\} \longrightarrow \{xs = [e_2 \text{ for } x \text{ in } e_1]\}$$

$$\left\{ \begin{array}{l} xs = [] \\ \text{for } x \text{ in } e_1: \\ \quad \text{if } e_2: \\ \quad \quad xs.append(e_3) \end{array} \right\} \longrightarrow xs = [e_3 \text{ for } x \text{ in } e_1 \text{ if } e_2]$$