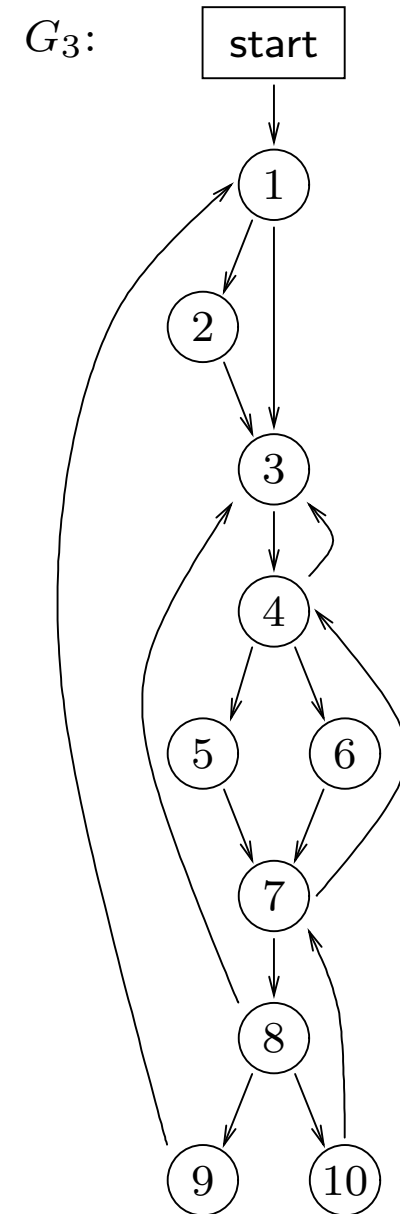
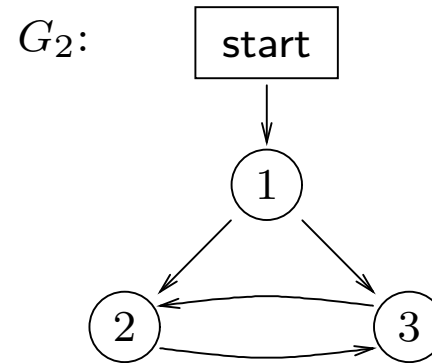
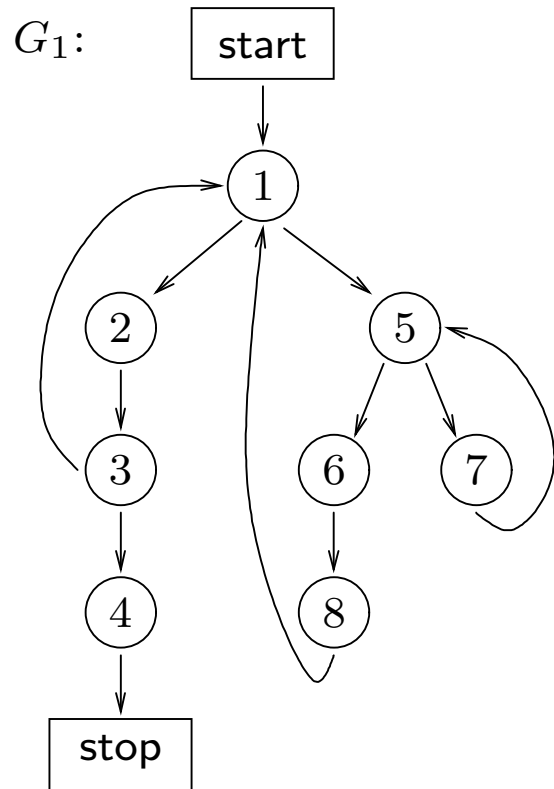
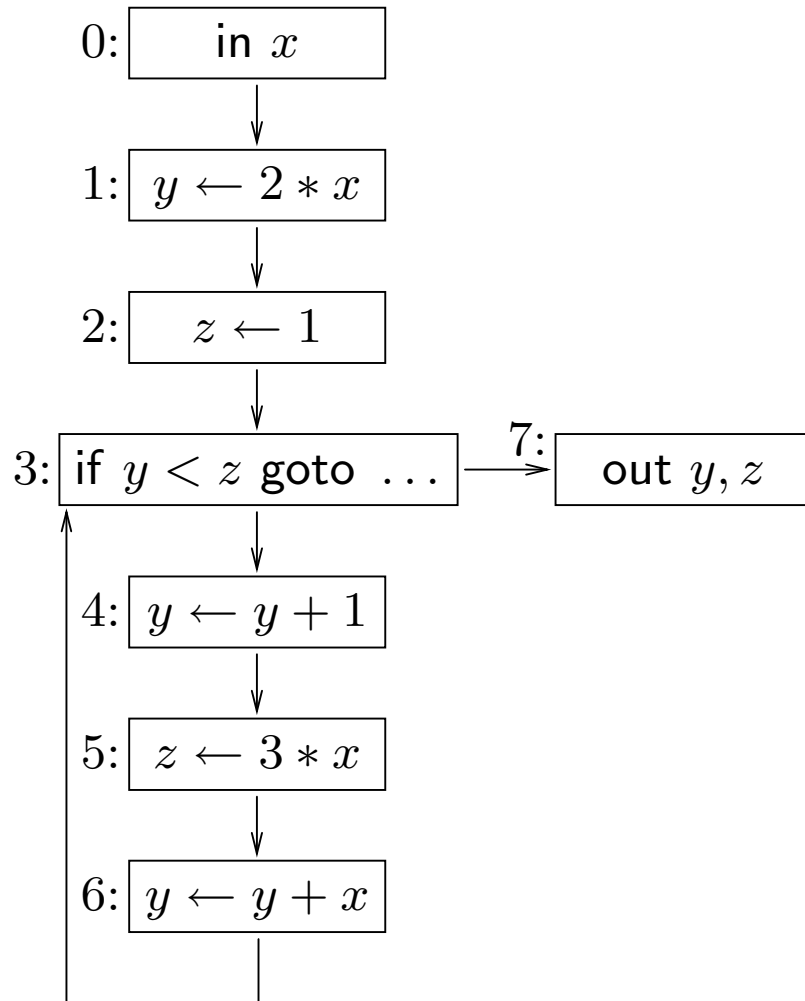


Beispiele für Flussgraphen



Beispiel: RD-Analyse und ud-chains



Reaching Definitions:

$$RD_1 = d_s = \{(x, 0)\}$$

$$RD_2 = \{(x, 0), (y, 1)\}$$

$$RD_3 = \{(x, 0), (y, 1), (y, 6), (z, 2), (z, 5)\}$$

$$RD_4 = RD_3$$

$$RD_5 = \{(x, 0), (y, 4), (z, 2), (z, 5)\}$$

$$RD_6 = \{(x, 0), (y, 4), (z, 5)\}$$

$$RD_7 = RD_3$$

ud-chains:

$$ud(x, 1) = \{0\}$$

$$ud(y, 3) = \{1, 6\} \quad ud(z, 3) = \{2, 5\}$$

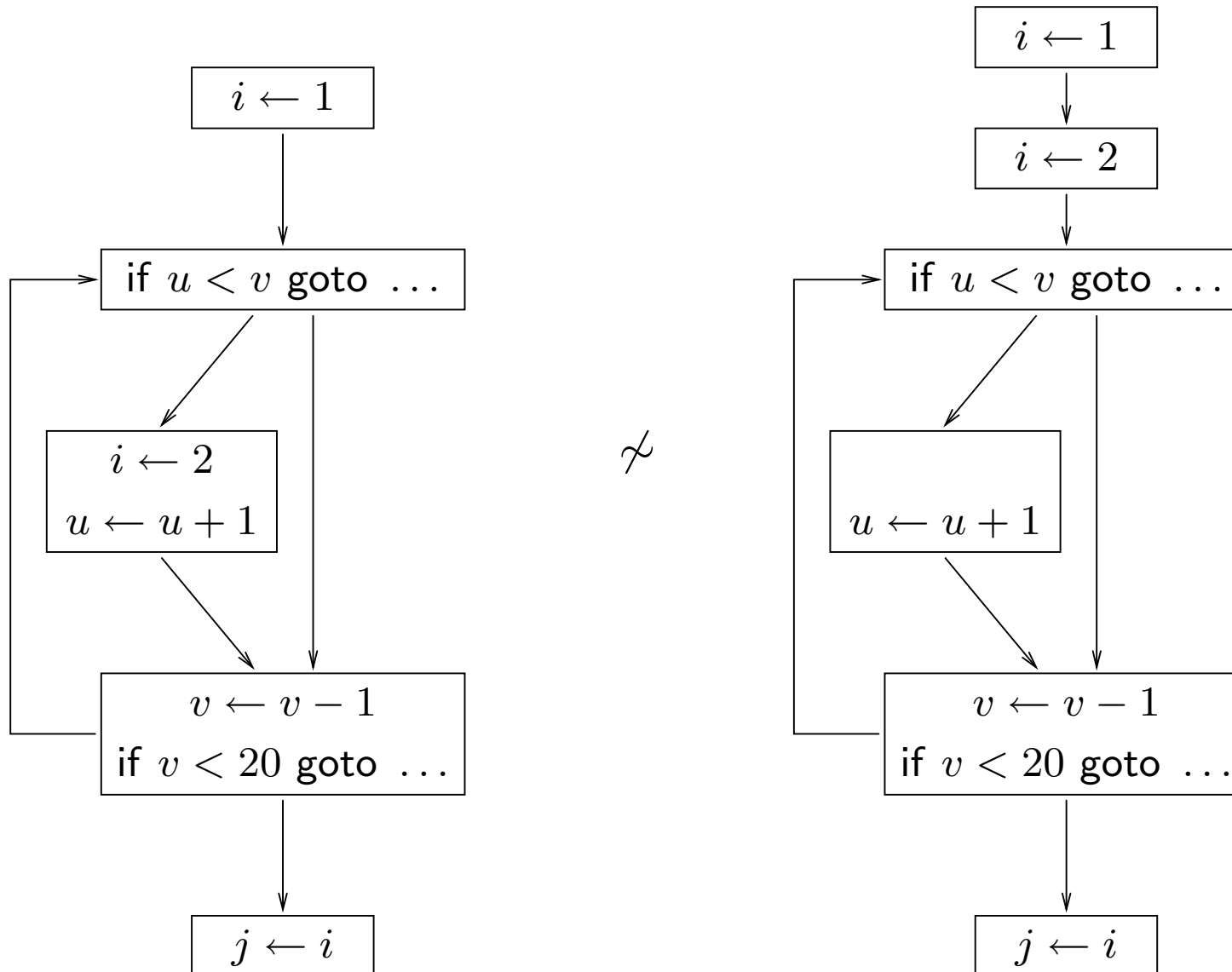
$$ud(y, 4) = \{1, 6\}$$

$$ud(x, 5) = \{0\}$$

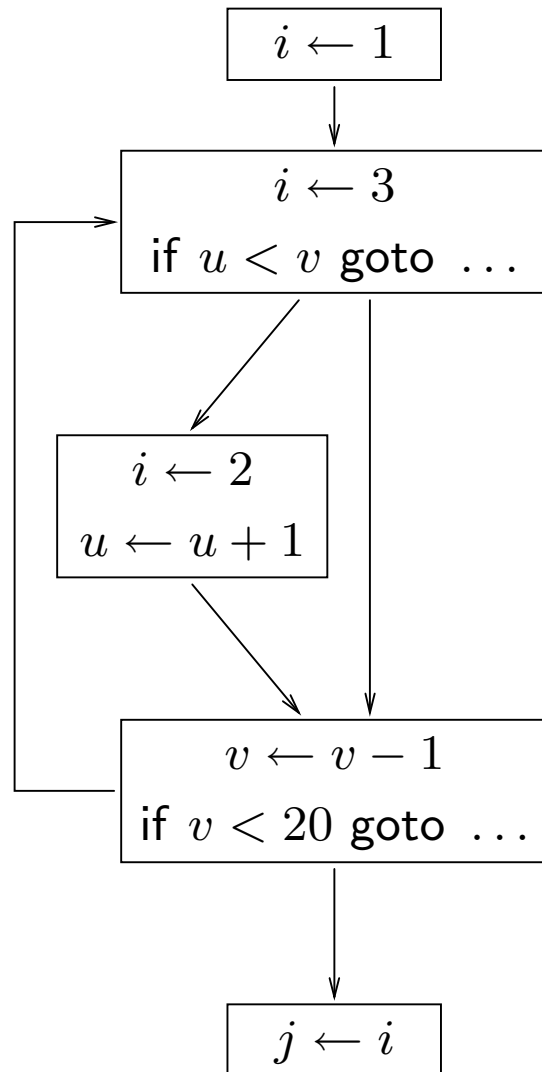
$$ud(x, 6) = \{0\} \quad ud(y, 6) = \{4\}$$

$$ud(y, 7) = \{1, 6\} \quad ud(z, 7) = \{2, 5\}$$

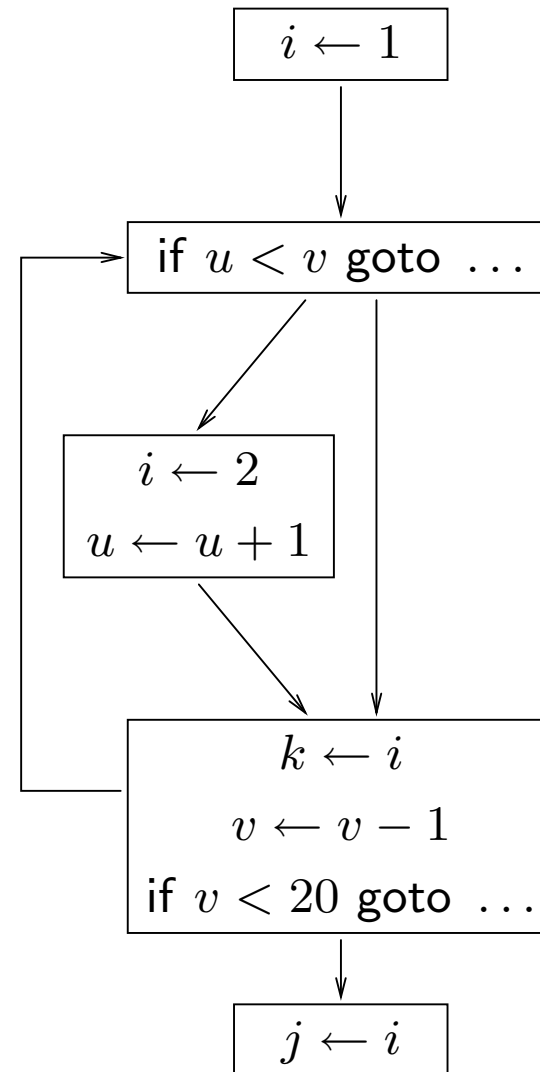
Beispiel: Illegale Codeverschiebung (Bedingung 1)



Bedingungen 2 und 3 für Codeverschiebung

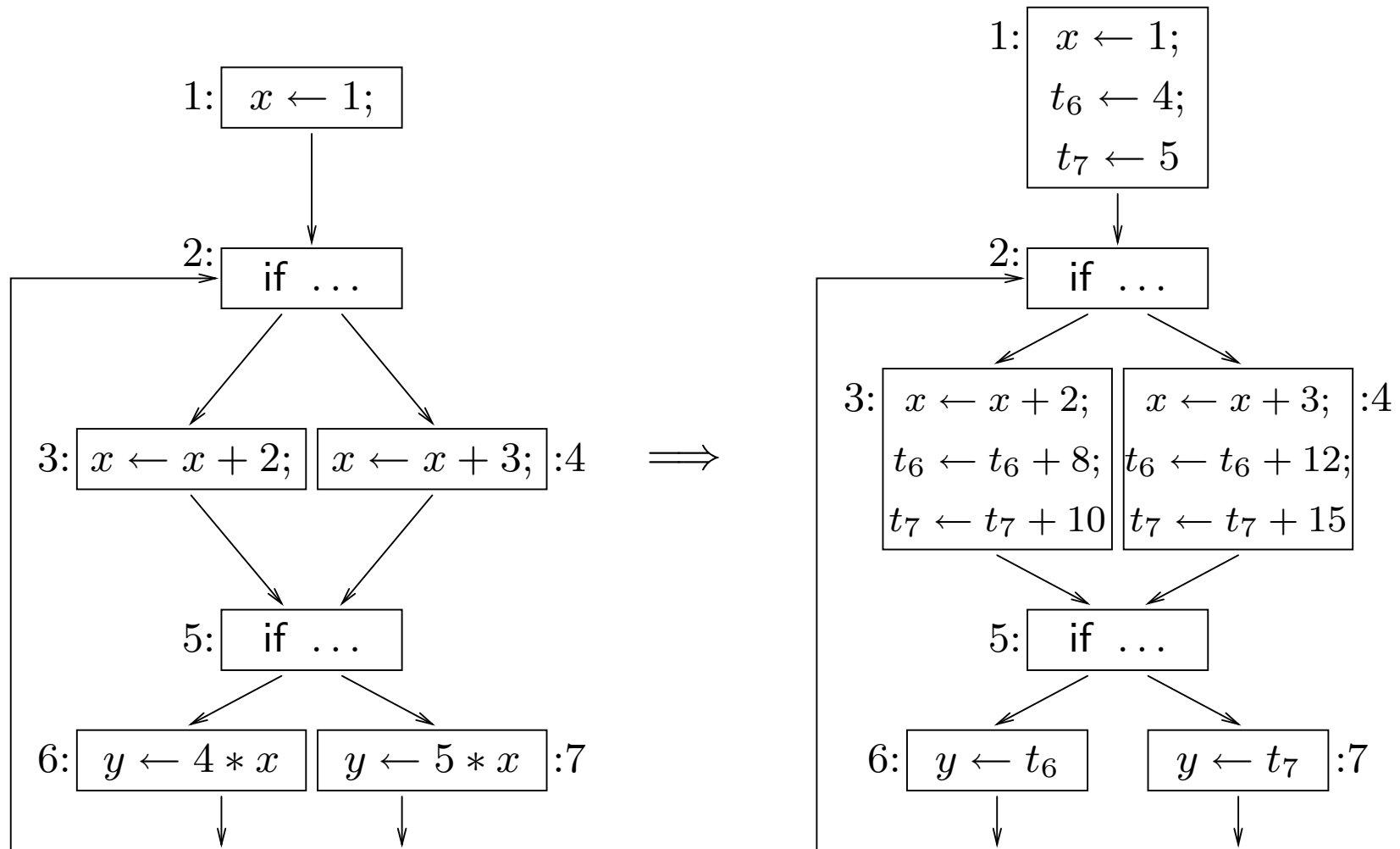


„ $i \leftarrow 3$ “ nicht verschiebbar



„ $i \leftarrow 2$ “ nicht verschiebbar

Beispiel: Strength reduction für Induktionsvariablen



Beispiel: Elimination von Induktionsvariablen

