



Informatik

Übungsstunde

Self Assessment 1

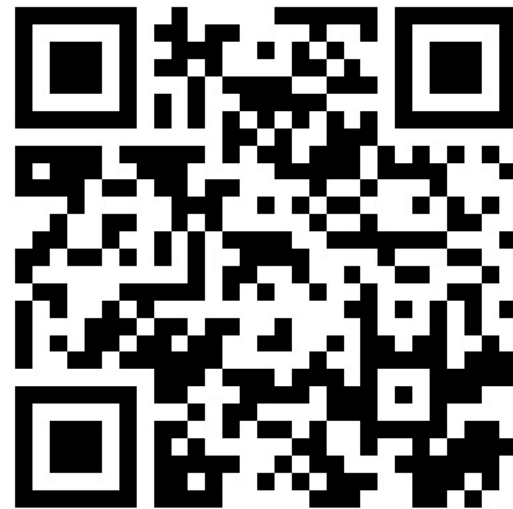
73 random cards are placed in a row, all face down.

A move consists of turning a face down card, face up and turning over the card immediately to the right.

Show *that no matter what the choice of cards to turn*, this sequence of moves must terminate



C++ Tutorial



Integer Division und Modulo

$$7 / 3 == 2$$

$$15 / 4 == 3$$

$$16 / 4 == 4$$

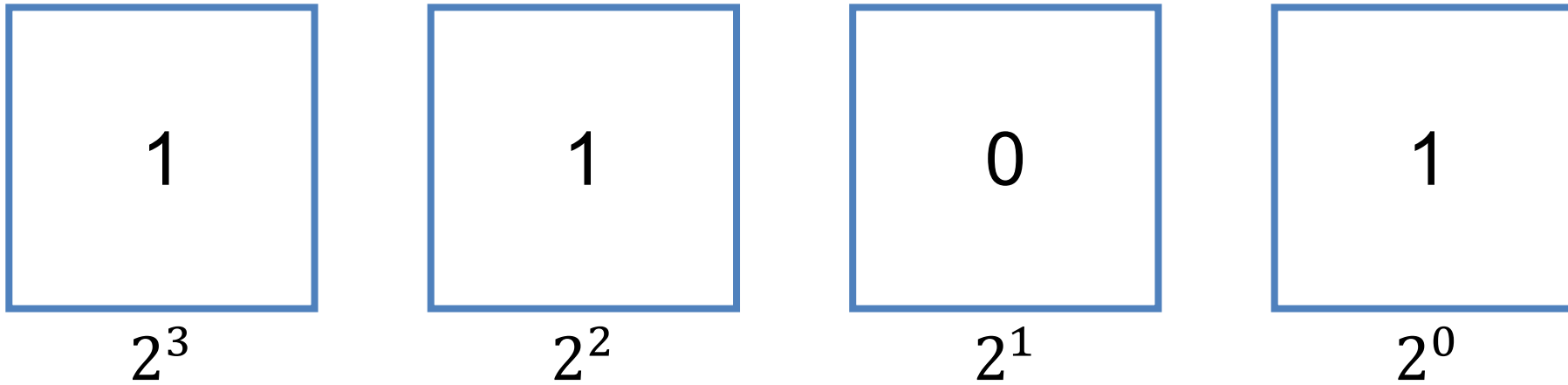
$$7 \% 3 == 1$$

$$15 \% 4 == 3$$

$$16 \% 4 == 0$$

Last three digits

Binärzahl -> Dezimalzahl



$$1 \cdot 2^3 + 1 \cdot 2^2 + 0 \cdot 2^1 + 1 \cdot 2^0 = 13$$

Dezimalzahl -> Binärzahl

$$61 = 2 * 30 + 1$$

$$30 = 2 * 15 + 0$$

$$15 = 2 * 7 + 1$$

$$7 = 2 * 3 + 1$$

$$3 = 2 * 1 + 1$$

$$1 = 2 * 0 + 1,$$