CS220: Lecture 11 Notes

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1 Boolean Operations and Functions

Complement Denoted by a bar.

$$\overline{0} = 1 \qquad\qquad \overline{1} = 0$$

Boolean sum Denoted as $+$ / OR

$$1 + 1 = 1 \qquad\qquad 1 + 0 = 1$$
$$0 + 1 = 1 \qquad\qquad 0 + 0 = 0$$

Boolean product Denoted as $\cdot$ / AND

$$1 \cdot 1 = 1 \qquad\qquad 1 \cdot 0 = 0$$
$$0 \cdot 1 = 0 \qquad\qquad 0 \cdot 0 = 0$$

2 Identities