Theorem 4.4 (Kraft Inequality) Let $\mathcal{C}$ be a D-ary source code, and let $l_1, l_2, \cdots, l_m$ be the lengths of the codewords. If $\mathcal{C}$ is uniquely decodable, then

$$\sum_{k=1}^{m} D^{-l_k} \leq 1.$$