Hash Functions

C2

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Choosing a good hash function

Hash Functions

A hash function is a function $f(k)$ that maps a key, k, to a value, $f(k)$, within a prescribed range.

A hash is deterministic. (For a given key, k, $f(k)$ will always be the same).

Choosing a Good Hash Function

A good hash for a given population, P, of keys, $k \in P$, will distribute $f(k)$ evenly within the prescribed range for the hash.

A *perfect hash* will give a unique $f(k)$ for each $k \in P$