



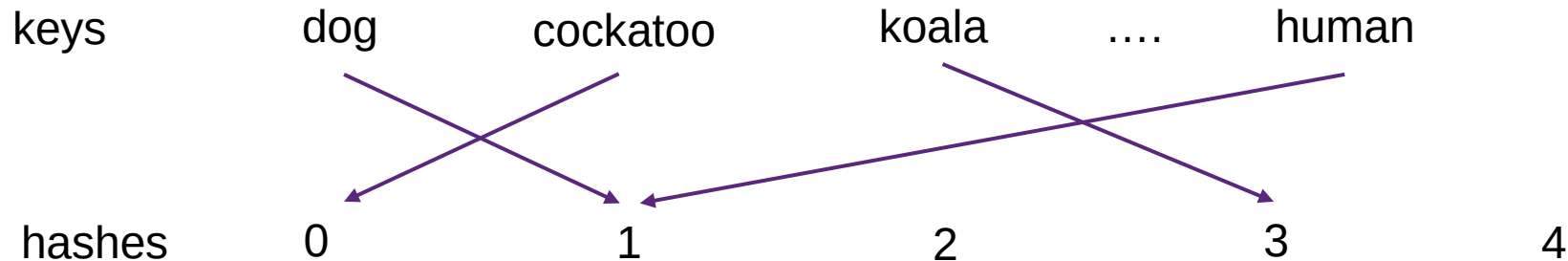
C04 Hash Functions

Hash functions
Choosing a good hash function

Hash Functions

A hash function is a function f that maps a key k , to a value $f(k)$, within a prescribed range. It maps arbitrary sized keys to fixed-sized *hashes*.

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 $k \in P$.