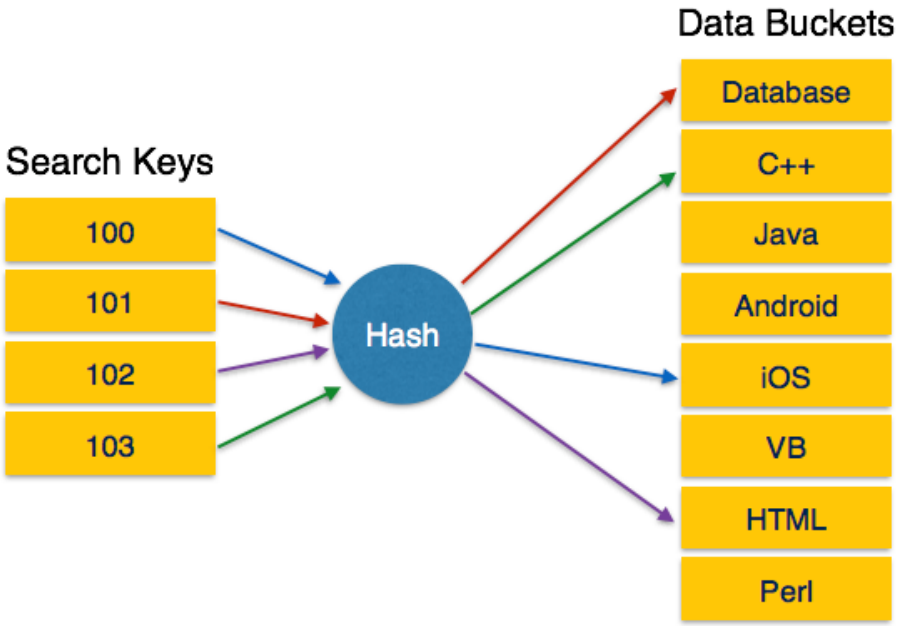
Static Hashing, Dynamic Hashing

Content

- Static Hashing
- Dynamic Hashing

Static Hashing

- Static hashing, when a search-key value is provided, the hash function always computes the same address. For example, if mod-4 hash function is used, then it shall generate only 5 values.



Operations of Static Hashing

- **Insertion** – When a record is required to be entered using static hash, the hash function **h** computes the bucket address for search key **K**, where the record will be stored.
  - ✓ Bucket address = h(K).
- **Search** – When a record needs to be retrieved, the same hash function can be used to retrieve the address of the bucket where the data is stored.
- **Delete** – This is simply a search followed by a deletion operation.
- **Update** – This is simply a search followed by a update operation

Dynamic Hashing

- The dynamic hashing method is used to overcome the problems of static hashing like bucket overflow.
- In this method, data buckets grow or shrink as the records increases or decreases. This method is also known as Extendable hashing method.
- This method makes hashing dynamic, i.e., it allows insertion or deletion without resulting in poor performance.

THANK YOU