

## Redis Commands To Be Used

### Addition 1:

I need to leverage Redis Hashes for storing trip details, therefore I need to maintain a structured and efficient data storage mechanism. These are the commands I will be using to do so. This implementation will have all CRUD operations used.

1. Initialize:
  - This deletes all the data from the databases in Redis so the application will have a clean slate
  - **FLUSHALL**
2. Create trip details (CREATE):
  - This command creates a new trip entry in Redis by setting multiple field-value pairs in the Hash associated with the specified trip ID.
  - **HMSET** trip:<trip\_id> field1 value1 field2 value2 ...
3. Read trip details (READ):
  - This command retrieves all the field-value pairs stored in the Redis Hash associated with the specified trip ID, allowing us to read the details of a trip.
  - **HGETALL** trip:<trip\_id>
4. Update trip details (UPDATE):
  - This command updates the existing trip details in Redis by setting multiple field-value pairs in the Hash associated with the specified trip ID.
  - **HMSET** trip:<trip\_id> field1 value1 field2 value2 ...
5. Delete trip details (DELETE):
  - This command deletes the trip entry from Redis, including all its associated field-value pairs in the Hash, based on the specified trip ID.
  - **DEL** trip:<trip\_id>

### Addition 2:

To efficiently manage and display the "Most Viewed Properties" using Redis, we need to employ a robust and scalable data storage strategy. The commands outlined below will be utilized to achieve this, covering a comprehensive set of operations to handle property views effectively. This approach leverages Redis's powerful data manipulation capabilities to ensure real-time updates and quick data retrieval, crucial for maintaining an interactive and responsive user experience.

1. Initialize:
  - Clears the entire Redis database to start fresh
  - **FLUSHALL**
2. Increment the View Count for a Property

- Increases the view count of a property each time it is viewed, reflecting its growing popularity.
- **ZINCRBY mostViewedProperties 1 propertyId**
- 3. Retrieve the Top 10 Most Viewed Properties
  - Fetches the properties with the highest view counts
  - **ZRANGE mostViewedProperties 0 9 WITHSCORES**
- 4. Get the View Count for a Specific Property
  - Retrieves the current view count of a specific property.
  - **ZSCORE mostViewedProperties propertyId**
- 5. Find the Rank of a Specific Property
  - Determines the rank of a property based on its view count within the sorted list.
  - **ZRANK mostViewedProperties propertyId**
- 6. Update the View Count for a Property Directly
  - Sets a specific view count for a property, useful for corrections or batch updates.
  - **ZADD mostViewedProperties score propertyId**