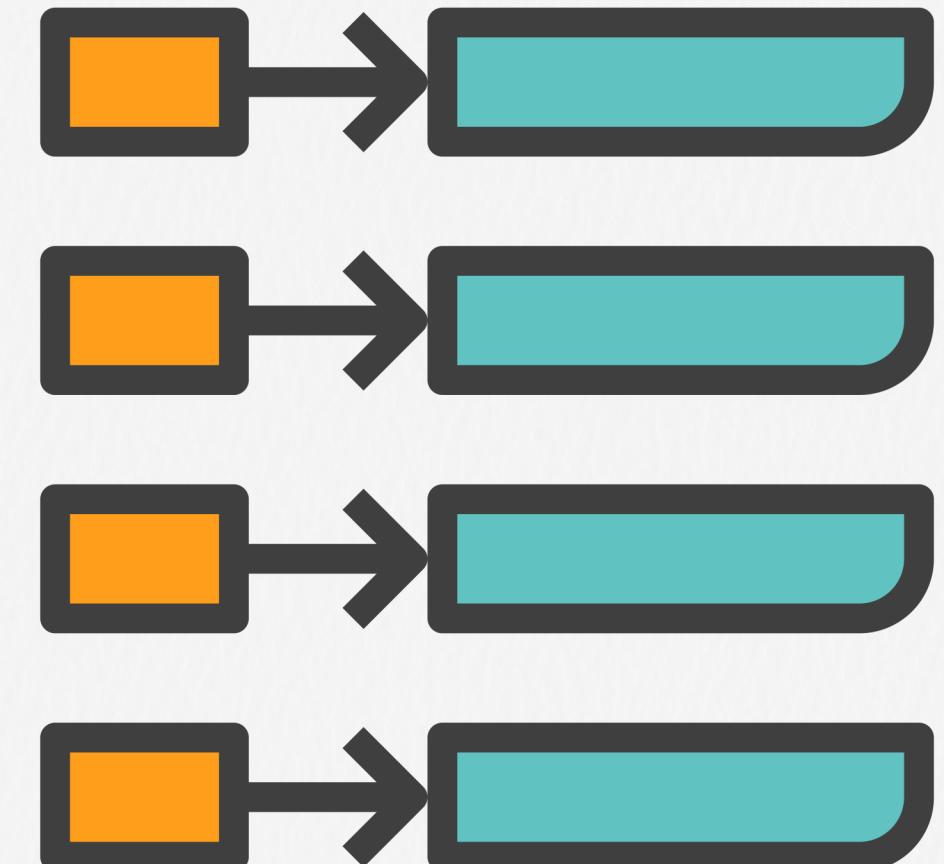


String data type

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- String data type is a fundamental data structure used to **store text or binary data with a maximum size of 512MB**.
- It can contain any type of data, including **images, serialized objects, or simply plain text**
- Usage
 - caching
 - session management
 - counters
 - rate limiting
 - storing serialized data



Common operations

- **SET** key value: Sets the value of a key.
- **GET** key: Retrieves the value of a key.
- **INCR** key: Increments the integer value stored at the key by one.
- **DECR** key: Decrement the integer value stored at the key by one.
- **APPEND** key value: Appends a value to the existing value of a key.
- **GETRANGE** key start end: Retrieves a substring of the string stored at a key.
- **STRLEN** key: Returns the length of the string value stored at the key.
- and more...

Expiration(TTL - Time To Live)

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- **EX**: in seconds.
 - SET key_name value EX 3600
- **PX**: in milliseconds.
 - SET key_name value PX 60000
- **EXAT**: absolute UNIX timestamp.
 - SET key_name value EXAT 1645454400
- **PXAT**: absolute UNIX timestamp in milliseconds
 - SET key_name value PXAT 1645454400000

Number value

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- Redis is primarily a key-value store and **doesn't have explicit support for different data types**. So, even though you set a value as an integer, Redis still stores it as a string internally.
- This means that when you retrieve the value later, **you'll need to parse it back into a numerical type in your application code if you want to perform arithmetic operations or other numerical manipulations**

