

# REDIS cheatsheet [v1.0]

starting the server

```
cd redis; ./redis-server
```

running the client

```
./redis-cli <command>
```

## commands

generic commands for all types

<b>exists</b> <i>key</i>	Test if specified key exists. Return: 1 if exists, 0 if not
<b>del</b> <i>key1 key2 ... keyN</i>	Remove the specified keys. Return: integer > 0 if keys removed, 0 if none of the keys existed
<b>type</b> <i>key</i>	Return the type of the value stored at <i>key</i> , as a string. Return: "none", "string", "list", "set"
<b>keys</b> <i>pattern</i>	Return all keys matching <i>pattern</i> . Ex: keys h*llo, keys h?llo, keys h[aeo]llo Return: bulk reply string with keys separated by spaces
<b>randomkey</b>	Return a randomly-selected key from the current database. Return: the selected key, or empty string if database is empty
<b>rename</b> <i>oldkey newkey</i>	Atomically renames key. <b>Note:</b> If <i>newkey</i> exists it is overwritten. Return: 1 if OK, 0 if <i>oldkey</i> doesn't exist or if it equals <i>newkey</i>
<b>renamenx</b> <i>oldkey newkey</i>	Atomically renames key, fails if <i>newkey</i> exists. Return: 1 if OK, 0 if <i>newkey</i> exists, if <i>oldkey</i> doesn't exist or if it equals <i>newkey</i>
<b>dbsize</b>	Returns the number of keys in the current database. Return: integer, the number of keys
<b>expire</b> <i>key seconds</i> <b>expireat</b> <i>key unixtime</i>	Sets timeout on the specified key. Return: 1 if timeout set, 0 if key already has a timeout or doesn't exist
<b>ttl</b> <i>key</i>	Returns remaining time to live, in seconds, for a key with EXPIRE set. Return: integer number of seconds, or -1 if key doesn't exist or has no expiration
<b>select</b> <i>db-index</i>	Selects a database by index (zero-based). Default database is 0. Return: 1 if OK, 0 if error
<b>move</b> <i>key db-index</i>	Moves a key from current database to specified database. Return: 1 if OK, 0 if key doesn't exist or is already present in the target database
<b>flushdb</b>	Deletes all keys in the currently-selected database. Return: 1 -- this command never fails
<b>flushall</b>	Deletes all keys in all existing databases. Return: 1 -- this command never fails

commands for strings

<b>set</b> <i>key value</i> <b>setnx</b> <i>key value</i>	Sets the value of <i>key</i> to the string <i>value</i> ; <i>setnx</i> will not overwrite an existing value. Return: 1 if OK, 0 if error
<b>get</b> <i>key</i>	Gets the value of <i>key</i> . Return: string value if OK, "nil" if key does not exist
<b>getset</b> <i>key value</i>	Atomically sets the value of <i>key</i> to the string <i>value</i> and returns old value of <i>key</i> . Return: value of <i>key</i> prior to the new value being set ("nil" if key did not exist)
<b>mget</b> <i>key1 key2 ... keyN</i>	Gets the values of all specified keys. Return: multi-bulk reply of all values, with "nil" for any keys that do not exist
<b>mset</b> <i>key1 value1 ... keyN valueN</i> <b>msetnx</b> <i>key1 value1 ... keyN valueN</i>	Sets the values of the keys to the string values; <i>msetnx</i> will not overwrite existing values if any key exists. Return: 1 if all keys were set, 0 if none were set
<b>incr</b> <i>key</i> <b>decr</b> <i>key</i>	Increments/decrements value of <i>key</i> by 1. Return: New value after increment/decrement operation
<b>incrby</b> <i>key integer</i> <b>decrby</b> <i>key integer</i>	Increments/decrements value of <i>key</i> by the integer value specified. Return: New value after increment/decrement operation

# REDIS cheatsheet page 2

commands operating on lists

<b>rpush</b> <i>key string</i> <b>lpush</b> <i>key string</i>	Adds the string to the head (rpush) or tail (lpush) of the list at key. Return: 1 if exists, 0 if key exists but is not a list
<b>llen</b> <i>key</i>	Returns the length of the list at key. Return: integer length, or error if key is not a list
<b>lrange</b> <i>key start end</i>	Returns the elements of list at key, zero-based. Negative numbers are offset from the end of the list. Return: requested elements or empty list if no match
<b>ltrim</b> <i>key start end</i>	Trims list at key to contain only the specified elements. Return: 1 if OK, error if key is not a list
<b>lindex</b> <i>key index</i>	Returns the element at the specified index of the list key. Return: the requested item; empty string if no such element; error if key isn't a list
<b>lset</b> <i>key index value</i>	Sets the element of list key at index to the specified value. Return: 1 if OK, error if index out of range or key isn't a list
<b>lrem</b> <i>key count value</i>	Removes count number of items from the list that have the specified value. Count 0 will remove all; negative count starts from the end. Return: # items removed
<b>lpop</b> <i>key string</i> <b>rpop</b> <i>key string</i>	Atomically removes and returns the first (lpop) or last (rpop) element from list key. Return: the element, or "nil" if empty/nonexistent list; error if key isn't a list
<b>blpop</b> <i>key1...keyN timeout</i> <b>brpop</b> <i>key1...keyN timeout</i>	Blocking pop, returns when a specified list contains an element. Return: key and popped value, or "nil" if operation times out
<b>rpoplpush</b> <i>srckey destkey</i>	Atomically returns last element from srckey and pushes as first element to destkey. Return: element popped/pushed, or "nil" if srckey empty or nonexistent

commands operating on sets

<b>sadd</b> <i>key member</i>	Adds member to the set stored at key. Return: 1 if OK, 0 if element was already a set member; error if key isn't a set
<b>srem</b> <i>key member</i>	Removes member from set key. Return: 1 if OK, 0 element not a set member; error if key isn't a set
<b>spop</b> <i>key</i> <b>srandmember</b> <i>key</i>	Returns random element from set key. spop will remove the element. Return: element, or nil object if key is empty or doesn't exist
<b>smove</b> <i>srckey dstkey member</i>	Atomically moves member from set srckey to set dstkey. Return: 1 if OK, 0 if element not found in srckey; error if either key isn't a set
<b>scard</b> <i>key</i>	Returns the number of elements in set key. Return: integer number of elements; 0 if empty or key doesn't exist
<b>sismember</b> <i>key member</i>	Return whether member is in set key. Return: 1 if element is a member, 0 if not or if key doesn't exist
<b>sinter</b> <i>key1 key2...keyN</i> <b>sinterstore</b> <i>dstkey key1...keyN</i>	Returns the members resulting from intersection of sets specified. sinterstore will store results in new set and return status code.
<b>sunion</b> <i>key1 key2...keyN</i> <b>sunionstore</b> <i>dstkey key1...keyN</i>	Returns the members resulting from union of sets specified. sunionstore will store results in new set and return status code.
<b>sdiff</b> <i>key1 key2...keyN</i> <b>sdiffstore</b> <i>dstkey key1...keyN</i>	Returns the members resulting from the difference between the first set and the rest. sdiffstore will store results in new set and return status code.
<b>smembers</b> <i>key</i>	Returns all of the members of set key. This is sinter, for only one set. Return: the members

## **sort** *key [by pattern] [limit start count] [get pattern] [asc|desc] [alpha] [store dstkey]*

Sorts the elements in the list, set, or sorted set at key. Default sort is numeric, ascending. Specifying **asc** or **desc** will sort in ascending or descending order. Specifying **alpha** will sort alphabetically. **limit** will return count number of elements beginning at offset start (zero-based). **store** will put the results of the sort into a list with key dstkey.

Specifying "**by pattern**" will sort using the values at keys generated using the pattern. For example, if the list/set being sorted contains the values 1, 2, 3 then "sort by weight\_\*" will sort using the values at keys "weight\_1", "weight\_2", "weight\_3".

Specifying "**get pattern**" will retrieve the values stored at keys generated using the pattern. For example, "get items\_\*" will return the values at keys items\_1, items\_2, items\_3 if the list/set being sorted contains the values 1, 2, 3.

# REDIS cheatsheet page 3

commands operating on sorted sets

<b>zadd</b> <i>key score member</i>	Adds <i>member</i> to zset <i>key</i> , with specified score. Return: 1 if added, 0 if element was already a member and score was updated
<b>zrem</b> <i>key member</i>	Removes <i>member</i> from zset <i>key</i> . Return: 1 if removed, 0 if element was not a member
<b>zincrby</b> <i>key incr member</i>	Increments score of <i>member</i> by <i>incr</i> and updates element's position in zset. Return: integer, the new score of <i>member</i> after the increment
<b>zrange</b> <i>key start end</i> <b>zrevrange</b> <i>key start end</i>	Returns elements in zset <i>key</i> within the specified index range, sorted in order (or reverse with <i>zrevrange</i> ). Option: "withscores" will also return scores.
<b>zrangebyscore</b> <i>key min max</i> [ <i>limit offset count</i> ]	Returns elements in zset <i>key</i> with scores within the specified range. Option: "withscores" will also return scores.
<b>zremrangebyscore</b> <i>key</i> <i>min max</i>	Removes elements from zset <i>key</i> with scores between <i>min</i> and <i>max</i> . Return: integer, number of elements removed
<b>zcard</b> <i>key</i>	Returns the number of elements in the zset <i>key</i> . Return: integer, the number of elements; returns 0 if <i>key</i> doesn't exist
<b>zscore</b> <i>key element</i>	Returns the score of the specified element in zset <i>key</i> . Return: the score, as a string; or "nil" if <i>key</i> or <i>element</i> don't exist

persistence and control commands

<b>save</b>	Saves all databases to disk. Connection requests will not be served during the save. Returns OK when complete.
<b>bgsave</b>	Saves all databases to disk in the background. Redis forks and writes so the parent process continues to process connection requests.
<b>lastsave</b>	Returns integer unix time of last successful save. This can be used following a <b>bgsave</b> to check if it was successful.
<b>bgrewriteaof</b>	Rewrites the Append Only File in the background.
<b>shutdown</b>	Stops all clients, saves databases, and quits.
<b>info</b>	Returns information and statistics about the server.
<b>monitor</b>	Used to enter commands for debugging. Telnet to redis server then enter <b>monitor</b> command. Enter <b>quit</b> to end the session.
<b>slaveof</b> <i>host port</i> <b>slaveof no one</b>	Makes server the replication slave of the redis server at <i>host/port</i> . The "no one" form turns off replication, making the server a master.
<b>quit</b>	Tells server to close the connection immediately.
<b>auth</b> <i>password</i>	Authorizes client using the provided password, if redis server is configured with <i>requirepass</i> . Returns OK or error if <i>password</i> is incorrect.

redis site: <http://code.google.com/p/redis/>  
mailing list: <http://groups.google.com/group/redis-db>